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NEW DELHI, SATURDAY, OCTOBER 10, 1987 (ASAVINA 18, 1909)

इस भाग में भिन्न पृथ्ठ संस्था दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके। [Separate paging is given to this Part in order that it may be filed as a separate compilation)

### माग मा—खब्द 2

### [PART III—SECTION 2]

मेटेन्ट कार्यालय द्वारा जारी की गई पेटेन्टों और विकादनों से सम्बन्धित अधिसूचनाएं और नोटिस [Notifications and Notices issued by the Patent Office relating to Patents and Designs]

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Calcut a, the 10th October 1987

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(1041)

# APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE, 234/4, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-20

The dated shown in the crescent brackets are the dates claimed under Section 135, of the Patents Act, 1970.

### The 3rd September 1987

- 698/Cal/87. Sven Hellestam And Otto Linander. Bicycle with a collopsible frame.
- 699/Cal/87, Priya Ranjan Sarkar. Improvements in garden plant watering system.

### The 4th September 1987

- 700/Cal/87. Lanxide Technology Company, LP. Production of ceramic and ceramic-metal composite articles with surface coatings.
- 701/Cal/87. Lanxide Technology Company, LP. Self-Supporting ceramic structures and methods of making the same.
- 702 Cal/87. Lanxide Technology Company, LP. Method for in situ taloring the metallic component of ceramic articles and airticles made thereby.
- 703/Cal/87. Lanxide Technology Company, LP. Method for producing substantially pure alumina material.

#### The 7th September 1987

- 704/Cal/87. Upendra Kumar Das. Magnetomatic imaging system.
- 705/Cal/87. Gobind Sanwaria. A novel electronic choke for fluorescent lamps.
- 706/Cal/87. Lanxide Technology Company, LP. Production of ceramic articles incorporating porous filler material
- 707/Cal/87. Lauxide Technology Company, LP. A method of making ceramic composites.
- 708/Call/87. Lanxide Technology Company, LP, An improved method for producing composite ceramic structures.
- 709/Cal. 87. Lanxide Technology Company, LP. Surface Bonding of ceramic bodies.
- 710/Cal 87. McDermott Incorporated. Convertible barge.
- 711/Cal/87. Md. Manzar Alam. Alam biogas cum biofertilizer plant.

### The 8th September 1987

- 712/Cal/87. Lanxide Technology Company, LP. Method for producing self-supporting ceramic bodies with graded properties,
- 713/Cal/87. Dudrick Medical Research Fund 1 Ltd. Method of preparing substrate composition for treating atherosclerosis.
- 714 Cal/87. Lanxide Technology Company, LP Method of making ceramic composite articles by inverse shape replication of an expendable pattern,
- 715/Cal/87. Lanxide Technology Company, LP. Modified ceramic structures and methots of making the same.
- 716 Cal/87. Lanxide Technology Company, LP. Ceramic composite structures having intrinsically fitted encasement members thereon and methods of making the same.
- 717/Cal/87. Yogendra Prasad Roy. Improvements in or relating to sentic latrines.

APPLICATION FOR THE PATENTS FILED AT THE PATENT OFFICE BRANCH, MUNICIPAL MARKET BUILDING, IIIRD FLOOR, KAROL BAGH, NEW DELHI-110 005,

#### The 3rd August 1987

- 677/Del/87. Vijaya Bahadur Singh, "Vijay Moscream".
- 678/Del/87. Advanced Cardiovascular Systems, Inc., "Catheter tip marker".
- 679/Del/87. Sanden Corporation, "Refrigerant compressor".
- 680/Del/87. Braunschweigische Maschinenbauanstalt Ag., "Continuously operble sugar centrifuge".
- 681/Del/87. Jefferson Approtrac Company Pty. Limited. "Vehicle".

#### The 4th August 1987

- 682/Del/87. Balcke-Durr Aktiengesellschaft, "Method and apparatus for securing parts to a hollow member".
- 683. Del/87. Siteg siebtechnik GmbH., "Spiral link belt with filler helices wrapped about the pintle wire". (Convention date 21st August, 1986, Australia).
- 684/Del/87. Piaggio & C.S.p.A., "Two-wheeler equipped with a device for locking a crash helmet onto the structure of said two-wheeler".
- 685 Del/87. Clinton Badger Pinke. "Furnace". (Convention date 8th August, 1986, New Zealand).

### The 6th August 1987

- 686/Del/87. The Babcock & Wilcox Company, "Insert for insulated steam injection tubing".
  [Divisional date 9th April, 1985].
- 687 Del/87. The Lubrizol Corporation, "Basic metal Dihydrocarbylphosphorodithicate and complexes thereof".
- 688/Del/87. Pfizer Inc., "Pyridopyrimidinediones".

### The 7th August 1987

- 689/Del/87. La Telemecanique Electrique, "An adjustment and dialogue device more particularly for speed variators".
- 690/Del/87. Warner-Lambert Company, "Pivotable razor cartridge with circular cam".
- 691/Del/87. Warner-Lambert Company, "Lockable pivotable razor".
- 692/Del/87. Warner-Lambert Company, "Blade assembly for variable span".
- 693/Del/87. Korting Hannover Aktiengesellschaft. "Improvement in a steam turbine system".

### Tht 10th August, 1987

- 694/Del/87. Brij Kishore Gupta, "Sound Vision films-slides".
- 695/Del/87. Anthony Alles, "A single use disposable hypodermic syringe". (Convention date 13th July, 1987) (Canada).
- 696/Delffl87. ICI Australia Operations Proprietary, Limited, "Explosive composition". (Convention date 26th August, 1986) (Australia).
- 697/Del/87. Dyson Refractories Limited, "Catalyst".
- 698/Del/87. Advanced Separation Technologies Incorporated, "Continuous gas treatment method and apparatus for adsorption processes".

#### The 11th August 1987

- 699/Del/87. Societe Nouvelle Reffinerie Meridionale De Ceresines Belix, "Method and device for packaging a permanent adhesive composition in the form of a block or section and packaged article obtained by implementing this method".
- 700/Del/87. Joh Enschede En Zonen Grafische Inrichting B.V., "Paper object printed with ink and coated with a protective layer, and process for producing it".
- 701/Del/87. Advanced Separation Technologies Incorporated, "Continuous recovery of sulfur from flue gas".

### The 12th August, 1987

- 702/Del/87. Alcan International Limited, "Contact conductor for electric vehicles". (Convention dates 20-8-1986 and 20-5-87) (Canada).
- 703/Del/87. Arrowhead Industrial Water, Inc., and Monsanto Company, "Integrated circuit manufacturing process".

### The 13th August, 1987

704/Del/87. Colgate-Palmolive Company, "The method of forming a solution of a non-toxic water-soluble pharmaceutically acceptable compound derivative." [Divisional date 31st May, 1985].

### The 14th August, 1987

- 705/Del/87. Shri Ram Institute for Industrial Research, "A process for the preparation of paraxylene dibromide".
- 706/Del/87. Shri Ram Institute for Industrial Research, "A process for modifying styrenne styrene block copolymers."
- 707/Del/87. Shri Ram Institute for Industrial Research, "A process for the preparation of styrene butadiene styrene block copolymers."
- 708/Del/87. Shri Ram Institute for Industrial Research, "A process for the preparation of n-butyllithium".
- 709/Del/87. Sudhamay Mitra, "An improved process of low temperature neat setting of polyester pure or wool/viscose blended fabrics in top dyed or piece dyed form".
- 710/Del/87. Haver & Boecker, "Rotating filling machine.
- 711/Del/87. Rohm and Haas Company. "Impact-property modifiers for thermoplastic polymers".

### The 17th August, 1987

- 712/Del/87. Energy Conversion Devices, Inc., "Conversion process for passivating short circuit current paths in semiconductor devices and articles thereby.
- 713/Del/87. The Lubrizel Corporation, "Sulfur-containing lubricant and functional fluid compositions".

### The 18th August, 1987

- 714/Del/87. Shri Ram Institute for Industrial Research, "A process for preparation of trioxane".
- 715/Del/87. Piaggio & C.S.A., "Two-wheeler equipped with a device for locking an object, in particular a crash helmet, onto the structure of the same vehicle".
- 716/Del/87. Bendix France, "Automatic adjustment spacer for a drum brake and blank for producing the body of such a spacer".
- 717/Del/87. Belgorodsky Tekhnologichesky Institute Stroitelnykh Materialov Imeni I.A. Grishmanova., "Ball Tube mill".
- 718/Del/87. The B.F. Goodrich Company, "Skinless prous particle pvc resin and process for producing same.

719//Del/87. Vsesojuzny Nauchno-Issledovatelsky I Proektny Institut Aljuminievoi Magnievol I Elektrodnoi Promyshlennosti, "Method of preparing aluminium hydroxide".

#### The 19th August, 1987

- 720/Del/87. The Tata Energy Research Institute, "The preparation of solar water heater using concrete slabs".
- 721/Del/87. Council of Scientific and Industrial Research, "A propulsion device for aircrafts".
- 722/Del/87. Council of Scientific and Industrial Research, "Flexible element for cart wheel axle and a cart fixed with wheels incorporating the said flexible element".
- 723/Del/87. Alphone Nery Gonsalves, "Roatate the generator automatically to produce electricity".
- 724/Del/87. Council of Scientific and Industrial Research, "A process for the preparation of indicator paper for on the spot testing of iodine in iodated salt".
- 725/Del/87. The Lubrizol Corporation, "Phosphorus-and/ or Nitrogen-containing derivatives of sulfur-containing compounds, lubricant, fuel and functional fluid compositions".
- 726/Del/87. Pont-A-Mousson S. A., "Device for fitting a take-off branch to a pipe".

### The 20th August 1988

- 727/Del/87. Council of Scientific and Industrial Research, "Blood analysis equipment".
- 728/Del/87. Imperial Chemical Industries Plc., "Nitrogen production".

  (Convention date 27th August, 1987) (U.K.).
- 729/Dcl/87. The Lubrizol Corporation, "Sulfur-containing compositions, Lubricant, Fuel and functional fluid compositions".

### The 21st August 1987

- 730/Del/87. Council of Scientific and Industrial Research, "A process for the preparation of an inhibitor for multi purpose applications for corrosion inhivition, pickling and cleaning of metals and alloys".
- 731/Del/87. S.P.C. Holding Company, "Single and polyphase Electro-magnetic Induction Machines having regulated polar magnetic sysmmetry".
- 732/Del/87. Council of Scientific and Industrial Research, "An Improved solvent extraction process for the production of food grade hexane".
- 733/Del/87. Digital Equipment Corporation, "Interface between processor and special instruction processor in digital data processing system".
- 734/Del/87. Digital Equipment corporation, "Bus interface circuit for digital data processor".
- 735/Del/87. Digital Equipment Corporation, "Cache invalidate protocol for digital data processing system".
- 736/Del/87, Mechanical Plastics Corp., "Fastening Device".
- 737/Dcl/87. Uniroyal Inc., "Power transmission system". [Divisional date 22nd December, 1984].
- 738/Del/87. Exxon Research and Engineering Company, "An improved spiral wound element for separating dewaxing aid from wax".

  [Divisional date 30th November, 1984]

# APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, 61, WALLAJAH ROAD, MADRAS-600 602.

### The 10th August 1987

- 570/Mas/87, K. A. Ranghachary. An electronic auto horn-
- 751/Mas/87. K. A. Ranghachary. Steam Engine without 'D' Valve.
- 572/Mas/87. INCO Alloys International, Inc. Nickel-chromium alloy of improved fatigue strength.
- 573/Mas/87. Modray Limited. System for controlling access to a store of information. (August 16, 1986; United Kingdom).

### The 11th August 1987

- 574. Mas. 87. Rhone-Poulenc Films. Process for coating polyester films and new films comprising a surface coating.
- 575/Mas/87. Universal Technic. A current measuring device.
- 576 Mas/87. The Dow Chemical Company. Flexible polyuicthane foams based on diffunctional polyols and MDI and method for preparing the same.

#### The 12th August 1987

- 577/Mas/87. Moechst Aktiengesellschaft, A method for the determination of lysozyme activity.
- 578/Mas/87. Toa Trading Co., Ltd. Method of controlling generation of clinker ash from exhaust gas dust of coal.
- 579/Mas/87. Toa Trading Co., Ltd. Method of controlling deactivation of denitrating catalyst.
- 580/Mas. 87. Linde Aktiengesellschaft. Process for purification of a gas stream by a nitrogen scrubbing.
- 581/Mas 87, Data Card Corporation. Image permanence device.

### The 13th August 1987

- 582/Mas/87. Lucas Industries Public Limited Company. A brake pressure booster and master cylinder assembly.
- 583/Mas 87. Minnesota Mining and Manufacturing Company. Fluorochemical oxazolidinones.
- 584/Mas/87. The Dow Chemical Company. Meta-Malo-Phenolic Alkylation products and epoxy systems.
- 585/Mas 87. The Dow Chemical Company. Vinylbenzyl ethers polyhydric halogenated phenolic compounds.
- 586/Mas/87. Stauffer Chemical Company. A method of preparing a dry blend capable of forming a fast setting cement. (Divided out of Patent Application No. 662/Mas/84).
- 587/Mas/87. Yadkathody Sanjeeva Rai. An improved mouth

### The 14th August 1987

- 588/Mas/87. Permea Inc. Process and dope for forming asymmetric gas separation membranes having graded density skins.
- 589, Mas/87. Man Gutchoffnungshutte GMBH. Feed apparatus for a furnace. (July 16, 1987; United Kingdom).

### The 17th August 1987

- 590/Mas. 87. IDL Chemical Limited. 'A Non-Primary Charge Detonator'.
- 591/Mas/87. Indian Institute of Technology. A Method of, and a Device for, Boring holes Through thin sheets of Hard and/or Brittle Metallic Members.
- 592/Mas/87. Deutsche Texaco AG. Poduction of isopropyl alcohol and tertiary alcohols having 4 or 5 carbon atoms in the Molecule.

- 593 Mas/87. The Dow Chemical Company, Current Collector Bonded to a solid polymer membrane.
- 594/Mas/87, Henkel Corporation, Low-Sling Fiber Lubricant,
- 595/Mas/87. Mass Transfer Limited, Packing Elements. (August 15th, 1986; Great Britain).

#### The 18th August 1987

- 596 Mas/87. Stettner and Company. Piezoelectric Ceramic Acoustic Transducer.
- 597 Mas/87. Communications Satellite Corporation. Electromagnetically coupled printed-circuit antennas having patches or slots capacitively coupled to Feedlines.
- 598/Mas '87. The Chamberlain Group, INC. Train of Highway Trailers using improved railroad Truck Suspension.
- 599/ Mas/87. Aluminium Pechiney. Process and apparatus for shaping carbonaceous Blocks by Multiaxial Compacting.

### The 19th August 1987

- 600/Mas, 87. Lucas Industries Public Limited Company.
  Pneumatically operated servo-booster. (August 21st, 1986; Great Britain).
- 601/Mas 87. Transcom Australia Limited, Modem and Data Communication (August 22nd, 1986, Australia).
- 602 Mas/8. Dec Van Enterprises Company Limited, Method and Apparatus for killing insects.

#### The 20th August 1987

- 603/Mas/87. K. Seshadri and Shantilal P. Joshi. A Device relating to Hydro-magnetic conveyor and separator for Grinding Machines.
- 604/Mas/87. Manjeshwar Prabhakur Prabhu and Mysore Vinoda Rao. A Device for Tapping Flectrical Fnergy from a current-carrying acsr Feeder Cable.
- 605 Mas, 87. Manjeshwar Prabhakar Prabhu and Mysore Vinoda Rao. A Spring loaded device for tapping electrical energy from a current-carrying aesr Feeder Cable.

### The 21st August 1987

- 606/Mas. 87. K. A. Ranghachary. Oceanic electric power Station.
- 607. Mas/87. Scimat Limited. Laminated Article. (August 22nd, 1986; U. K.).
- 608/ Mas/87. Scimat Limited. Plugged Microporous Film. (August 22nd, 1986; U. K.).
- 609 Mas/87. Scimat Limited Waterproof article and method of making a Waterproof article. (August 22nd, 1986; U. K.).

### ALTERATION OF DATE

161128. (43/Cal/86)	Ante dated to 1st June, 1983.
161148. (275/Bom/85)	Ante dated to 5th May, 1983.
161150. (189/ <b>D</b> el/84)	Ante dated to 28th April, 1980.
161151. (239, Del/84)	Ante dated to 21st July, 1980,
161166 <sub>.</sub> (873/Del/84)	Ante dated to 25th May, 1981,
161169. (751/Del/79)	Ante dated to 14th February, 1978.
161179.	Ante dated to 5th February, 1982.

(522/Cal/86)

### COMPLETE SPECIFICATION ACCEPTED

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A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of cach specification is Rs. 2/- (postage extra if sent ou' of India). Repuisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

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CLASS :152-F; 205-H

161122

Int. Cl.; C 08 g 22/00; B 60 c 1/00.

A PROCESS FOR PRODUCING REINFORCED POLY-URETHANE TIRES.

Applicant: LIM INTERNATIONAL, S. A., OF 37, RUE NOTREDAME LUXEMBOURG.

Inventors: I. ANDREAS ROBERT SCHMIDT, 2. HERBER'I FRANZ STROHMAYER, 3, WALTER SIBRAL, 4. BARTON MILLIGAN.

Application No. 47 Cal. 85 tiled January 24, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office, Calcutta.

### 16 Claims

A process for forming a reinforced urethane tire formed by injecting a polyurea or polyurethane forming composition comprising a prepolymer having an excess of isocyanate groups and an aromatic diamine chain extender, into a tire mold, encapsulating a reinforcing cord in said tire and then curing said composition, the improvement which comprises utilizing a polymer or polyurethane composition having low hysteresis produced by reacting:

(a) a prepolymer formed by the reaction of (1) an aromatic polyisocyanate represented by the formula (1) of the accompanying drawings

where  $R_1$   $R_2$   $R_3$   $R_4$  represents H alkyl from 1-4 carbon atoms CN, halogen,  $CO_2R_5$ .  $CONR_4R_7$  where  $R_5$  represents alkyl of 1-6 carbon atoms and  $R_6$   $R_7$  represents alkyl of 1-6 carbon atoms and H, and mixtures thereof and (2) a polyol such as herein described of 500—5000 molecular weight of which at least 90% of the polyol is difunctional in a

quantity sufficient to provide from about 2 to 12 weight % isocyanate groups in said prepolymer; and

(b) a chain extender mix comprising an aromatic diamine represented by the formula (2)

where  $R_1$   $R_2$   $R_3$   $R_4$  represents H, alkyl from 1-4 carbon atoms CN, halogen,  $CO_4R_4$ .  $CONR_6R_7$  where  $R_5$  represents alkyl of 1-6 carbon atoms and  $R_6$   $R_7$  represents alkyl of 1-6 carbon atoms and H, and mixtures thereof in a polyol such as herein described having a molecular weight of from 500—5000 of which at least 90% of polyol is difunctional, said diamine being present in said chain extender mix to provide a proportion of from 0.5-5 equivalents amine per equivalent polyol.

Compl. specn, 20 pages

Drgs.' 2 sheets

CLASS :65-A

161123

Int. Cl.: H 02 m 3 24.

IMPROVEMENTS IN OR RELATING TO FREQUENCY CONVERSION APPARATUS.

Applicant: WESTINGHOUSE FLECTRIC CORPORA-TION, OF WESTINGHOUSE BUILDING, GATEWAY CENTRE, PITTSBURGH, PENNSYLVANIA 15222, UNITED STATES OF AMERICA.

Inventors: 1. LASZIO GYUGYI, 2. THEODORE MICHAEL HEINRICH, 3. GYU-HYEONG CHO.

Application No. 229/Cal, 85 filed March 28, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 6 Claims

In a frequency conversion apparatus having a plurality of phase-related static converters each coupled between a polyphase AC power source of frequency fin and a polyphase AC output of frequency fo including:

for each of said converters a plurality of controllable bilateral switching units controlled for conduction in succession during a time period (TP) characterizing said frequency for each switching unit having a controllable conduction time interval (t) within a common time frame (T) defined by a controllable repition rate, and occurring through said succession at said repitition rate to derive energy from said AC power source through the associated converter during successive segments of voltage, on a phase basis, and to apply the derived voltage segments of said succession to said output so as to form with associated like pluralities of converter switching units an AC polyphase output system:

the frequency fo of said AC output being a function of the difference between the frequency fin of said AC power source and said repition rate; the combination of ;

the said controllable conduction rate and operative on said controllable conduction time interval (t) for establishing with said succession of switching units n elementary conduction time intervals  $(t^s)$  distributed throughout the timeframe (T) of operation of each switching unit in said succession and occurring at a rate which is n time said repition rate, the sum of said elementary conduction time intervals  $(t^s)$  within such timeframe (T) being equal to said controllable conduction time interval (t) n being an integer in relation to the output frequency of said AC output; and

means for controlling the switching units of said succession each one n times before controlling another, thereby to improve the quality of the current in the AC output and in the input AC power source.

Compl. specn. 40 pages,

Drgs. 25 sheets

whereby said MMU provides a relocation base for a plurality of processes stored in said main memory without reprogramming of said MMU with user access to certain types of information in said main memory being limited.

Compl. Specn. 21 pages.

Drgs. 2 sheets

CLASS: 35-E.

161124

Int. Cl. C 04 b 35/00.

A REFRACTORY FIBER SUITABLE FOR USE AS. THERMAL INSULATION.

Applicant: COMBUSTION ENGINEERING, INC., OF 1000 PROSPECT HILL ROAD, UNITED STATES OF AMERICA.

Inventor: 1. THOMAS ENGENE WALTERS.

Application No. 1065/Cal/83 filed September 1, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcuttu.

#### 4 claims

A refractory fiber suitable for use as thermal insulation in temperature ranges of from 650°C to 1100°C fromed from a melt consisting essentially of 65 percent to 95 percent by weight aluminium silicate particles and 5 percent to 35 percent feldspar.

Compl. Specn. 8 pages. Drg. nil.

CLASS: 206-E.

161125

Int. Cl. G 06 f 1/00.

MEMORY MANAGEMENT UNIT FOR DIGITAL COMPUTER.

Applicant: APPLE COMPUTER, INC., OF 10260 BAND-LEY DRIVE, CUPERTINO, CALIFORNIA 95014, UNITED STATES OF AMERICA.

Inventors: 1. PAUL ALLEN BAKER, 2. GARY 1EE MARTEN,

Application No. 1171/Cal/83 filed September 24, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 10 claims

In a computer system which includes a central processing unit (CPU) and a computer memory, and improved memory management unit (MMU) comprising:

an MMU memory comprising a plurality of sections (contexts):

control means for selecting said MMU memory sections, said control means coupled to said CPU;

each of said MMU memory sections for receiving first addresses from said CPU and for providing different second addresses for accessing said main memory such that said MMU memory sections provide overlapping memory management;

at least some of said MMU memory sections also including storage means for receiving and storing signals representative of the type of information stored in location of said main memory, said storage means coupled to said CPU for receiving at least a portion of said first addresses;

accessing means for accessing said stored signals in said storage means when corresponding locations in said main memory are accessed by said second addresses;

coupling means for coupling said signals representative of said types of information stored in said memory to said main memory to limit accessing of certain of said types of information; CLASS: 48-C,

161126

Int. Cl. F 16 1 59/00.

LEAD-THROUGH INSULATORS, ESPECIALLY FOR REFRIGERATING MACHINES.

Applicant: GMT NOVOTNY GmbH, OF POSTFACH 1245 D-8264 WALDKRAIBURG, FEDERAL REPUBLIC OF GERMANY.

Inventor: 1. PROBST, GEORG, DIPLING.

Application No. 339/Cal/84 filed May 16, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 9 claims

A current leadthrough insulator especially for refrigerating machines comprising an insulator including a base portion and a plurality of nub portions extending upwardly from the top of said base portion, and an electrically conductive pin extending through said base portion and each of said nub portions, said insulator comprising a material of temperature stability insensitive to chemicals and having some elasticity.

Compl. Specn. 9 pages. Drgs. 2 sheets.

CLASS: 128-F.

161127

Int. Cl. A 61 m 5/00.

A DEVICE FOR FIXATION FOR A LONG PERIOD OF A TUBE INTRODUCED INTO THE PATIENT'S BODY.

Applicants: (1) V\$E\$OJUZNY NAUCHNO-IS\$LEDOVATELSKY INSTITUT MEDITSINS KIKH POLIMEROV, OF MOSCOW, NAUCHNY PROEZD 10, U\$SR; (2) MOSKOVSKY NAUCHNO-IS\$LEDOVATELSKY INSTITUT TUBERKULEZA, OF MOSCOW, ULITSA DOSTOEVSKOGO, 4. USSR; (3) BELGOROD-DNESTROVSKY ZAVOD MEDITSINSKING IZDELYIZ POLIMERNYKH MATERLALOV, OF BELGOROD-DNESTROVSKY, ODESSKAYA OBLAST USSR.

Inventors: 1. NIKOLAI MIKHAILOVICH SHISHOV, 2. VLADIMIR EVGENIEVICH ZELENETSKY, 3. NADE-ZHDA ALESEEVNA DEMINA, 4. IVAN MIKHAILOVICH BONDAREV, 5. ALEXANDR NIKOLAEVICH CHERNY, 6. ALISA ARNOLDOVNA ERTLI, 8. ANATOLY GRIGORIEVICH AVXENTIE, 9. STANISLAV NIKOLAEVICH I.EPETCHENKO, 10. IVAN PETROVICII SERZHANTU,

Application No. 642/Cal/84 filed September 14, 1984.

Appropriate office for opposition proceedings (Rule 4 Patents Rules, 1972) Patent Office, Calcutta.

### 7 claims

A device for fixation for a long period of a tube introduced into the patient's body, comprising a housing secured to the patient's body and provided with a flexible annular base, and a means for securing the tube in the housing, comprising a bushing which is stationarily mounted coaxially with respect to the housing and through which the tube is introduced into the patient's body, and ribs connecting the bushing with the flexible annular base and confining a cavity disposed between the flexible annular base and the patient's body and intended for realising a sanitary and hygienic treatment of the skin integument portion around the tube, the cavity being closed, with a cover.

Compl. Specn. 13 pages. Drgs. 2 sheets.

CLASS: 84-A+88-E.

161128

Int. Cl. C 01 b 2/02; C 10 j 3/00; C 10 k 1/00, 3/00.

APPARATUS FOR GENERATING A REDUCING GAS, AND FOR RECUCING IRON OXIDE.

Applicant: MIDREX INTERNATIONAL B.V. ROTTER-DAM, ZURICH BRANCH, OF WILFRIED-STRASSE 12, 8032 ZURICH, SWITZERLAND.

Inventors: 1. FRANK VIRGIL SUMERS, 2. DAVID CHARLES MEISSENER, 3. RONALD BROWN.

Application No. 43/Cal/86 dated January 21, 1986.

Division of Application No. 691/Cal/83 dated 1st June, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 5 claims

Apparatus for generating a low-sulfur reducing gas as herein defined and for reducing iron oxide therewith, said apparatus comprising:

- (a) a molten bath gasifier such as herein described for producing a gasifier gas, said gasifier containing a molten iron bath;
- (b) a generally vertical shaft furnace for the direct reduction of iron oxide said furnace having particle introducing means at the top thereof, particles removal means at the bottom thereof for establishing a descending burden therein, reducing gas introduction means between said particles removal means and a spent top gas outlet for removing spent top gas from the upper portion of said futnace;
- (c) a first conduit communicating with said gasifier and said reducing gas introduction means for removing reducing gas from said gasifier and introducing reducing gas to said shaft furnace;
- (d) means for cooling and cleaning said spent top gas removed from the upper portion of said shaft furnace:
- (e) a second conduit communicating between said spent gas outlet and said cooling and cleaning means;
- (f) acid gas removal means for removing CO<sub>n</sub> from said cleaned, cooled spent top gas;
- (g) a third conduit communicating with said spent top gas cooling and cleaning mean; and said acid gas removal means;
- (h) a fourth conduit communicating between said acid gas removal means and the bottom of said gasfier;
- a fifth conduit communicating between said caid gas removal means and said first conduit;
- (j) a sixth conduit communicating between said acid gas removal means and said first conduit having heating means therein:
- (k) means for injecting solid fossil fuel into the bottom of said gasifier beneath the surface of said molten iron bath; and
- (1) means for injecting oxygen into said gasifier beneath the surface of said molten iron bath.

Compl. Speen. 12 pages. Drgs. 3 sheets.

CLASS: 89 & 126 B.

161129

Int. Class: G01 b, 1/00, 7/12.

Title: "APPARATUS FOR MEASURING BORES".

Applicant: TESA S.A., A COMPANY ORGANISED UNDER THE LAWS OF THE STATE OF VAUD, SWITZERLAND, OF RUE BUGNON 38, 1020 PENENS, SWITZERLAND,

Inventor: VOINESCU NICOLAE.

Application for Patent No. 591/Del/83 filed on 30th August, 1983.

Appropriate office for filing opposition proceedings (Rule 4, Patents Rule 1972) Patent Office Branch, New Delhi-110 005.

#### 4 claims

Apparatus to rmeasuring bores comprising a tubular body having three radial end slots spaced over its periphery, three leaver shaped measuring fingers having each a point contact segment for sensing the wall of a bore to be measured, each of said measuring fingers being pivotd on a shaft in one of said slots for radial movement with respect to the body, an axial hearing fixed in said body and a rod mounted in said axial bearing fixed in said body and a rod mounted in said bearing so as to be axially movable in the body, an abutment member fixed to one end of said rod between the measuring fingers, a resilient member connected to the body and to each measuring finger to bias said measuring finger against the abutment member, a spring bearing connected to the body and to the rod to axially bias the rod and its abutment member and move apart the measuring fingers, a manual control member connected to the rod and having an action opposing that of the spring bearing to allow resilient retraction of the measuring fingers, displacement transducer connected to the body and to the rod 'or converting the displacements of the rod with respect to the body into electrical signals representing these displacements, a processing circuit connected to the displacement transducer, said processing circuit comprising electronic converting means to convert said electrical signals into tronic converting means to convert said electrical signals into measurement signals each representing the diameter of a circle formed on the three contact points of the three point contact segments of the measuring fingers with the wall of the bore to be measured, a memory means connected to said converting means for recording the smallest value of said measurement signals, a manual measurement initialization switch means connected to said converting means for switching en the processing circuit after the three point contact segments of the measuring fingers contacting the wall of the bore to be measured, and a display means also connected to said converting means for displaying said smallest value recorded. converting means for displaying said smallest value recorded for the measurement signals.

Compl. Specn. 17 pages. Drg. 1 sheet.

CLASS: 27 I, O

161130

Int. Cl.: E 04 b - 2/00

"AN END CONNECTOR FOR CONNECTING TWO OR MORE HOLLOW TUBULAR STRUCTURAL NUMBERS".

Applicant: ALEJANDRO STEÍN, OF RESIDENCIAS SIERRA NEVADA, CALLE CHULA VISTA, CHULA VISTA LAS MERCEDES, CARACAS. VENEZUELA, A CITIZEN OF VENEZUELA.

Inventor: ALEJANDRO STEIN.

Application for Patent No 84/Del/84 filed on 30th January, 1984.

Appropriate office for opposition proceeding (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-

### 4 Claims

An end connector for connecting two or more hollow tublar structural member and for insertion into an opening at one end of a said tubular member, said connector having a general V-shape formed by two side panels joined at one end, said side panels being resilliently movable upon pressure applied to the outside thereof to come together at said open end and upon release of pressure to separate from each other at said open end for ready insertion into said open end of said tubular member upon application of pressure to said side panels to bring said panels together, each of said panels being provided at said open end with means for engaging the inside of said tublar member when said connector is inserted within the opening of said end of said tublar member and the pressure released and each side panel of said connector being provided with a top notch and a bo'tom notch, said notches in each of said side panels being of substantially the same size and vertically below each other, the notches in one of said side panels matching the notches in the other side panel said ronnecor.

Compl. speen. 18 pages.

Drgs. 4 sheets

CLASS : 50 B & D

161131

Int. Cl.; E 25 j 3/00.

"APPARATUS FOR COOLING A FLUID FROM ABOUT AMBIENT TEMPARATURE TO A LOW TEMPERATURE".

Applicant: L'AIR LIQUIDE, SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE, OF 75, QUAI D'ORSAY-75007 PARIS, FRANCE, A FRENCH BODY CORPORATE.

Inventor: PIERRE GAUTHIER

Application for Patent No. 93/Del/1984 filed on 31st January 1984.

Appropriate office for opposition proceeding (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

### 4 Claims

An apparatus for cooling a fluid from about ambient temperature to a low temperature, the apparatus comprising a cooling circuit containing a cooling mixture composed of constituents of different volatilities, the circuit comprising a first-stage compressor having an inlet at a low pressure and an outlet at a medium pressure; a first pre-cooling device connected to said outlet and comprising a first vapour outlet and a first liquid outlet; a second stage compressor having an inler at said medium pressure connected to said first vanour outlet and a high-pressure outlet; a second pre-cooling device onliet and a high-pressure outlet; a second pre-cooling devices connected to said high-pressure outlet and comprising a second vapour outlet and a second liquid outlet; pressure pipes respectively connecting said first and second liquid outlets and said second vapour outlet to a return pipe which is in turn connected to said first-stage compressor inlet, each said pressure vine comprising an upstream part in heat exchange relationship with said return pipe, each said upstream part of said pressure pine extending to a respective cold end provided with a respective expansion valve; wherein at least one of said pre-cooling devices comprise a distillation column connected to the outlet of the corresponding compressor and having a bottom outlet connected to the corresnonding liquid outlet through a cooler and a top outlet connected to a phase separator through another cooler, the bottom of the separator being connected to the top part of the column by a reflux pipe and the top of the separator being connected to the corresponding vapour outlet.

Compl. speen, 15 pages.

Drgs. 3 sheets

CLASS: 172 B & F

161132

Int Cl.: D 02 i 1/00.

"PACKAGE WIND CUTTING APPARATUS FOR CUTTING STRANDS INTO PREDETERMINED LENGTHS".

Applicant FASTMAN KODAK COMPANY, A COMPANY ORGANISED UNDER THE LAWS OF THE STATE OF NEW ILRSEY, OF 313 STATE STREET. ROCHESTER, NEW YORK 14650, UNITED STATES OF AMERICA.

Inventor: ALBERT FDWARD SPALLER.

Application for Patent No 97/Del/1984 filed on 1st February 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-

### 7 Claims

Package wind cutting apparatus for cutting a strand into predetermined lengths, said apparatus characterised by:

(a) a cutting head mounted on a support shaft and rotatable around its axis (A) at a predetermined speed, said cutting head having a plurality of cutting blades mounted and arranged thereon to form a cutting zone of predetermined width and predetermined peripheral length to receive and store in cutting position multiple windings of strand for subsequent cutting into said predetermined lengths:

- (b) strand winding means connected to an outer end of a rotary shaft rotatable around and axis (B) intersecting said axis (Λ) of the cutting head in such manner that said strand winding means traverses back and forth along a predetermined width of said cutting zone during each revolution of the strand winding means, whereby cooperating between (I) rotation of said strand winding means at a higher speed than said cutting head and (2) the relative rotations of said strand winding means as it traverses back and forth and of said cutting head, being effective to position multiple crossing windings of said strand in said cutting position for said subsequent cutting; and
- (c) pressure roller means provided on opposite sides of said support shaft and spaced from each other and from the cutting head for applying pressure at predetermined locations in said cutter zone against said windings and toward the cutting edges of said blades to cut strand into said predetermined lengths.

Compl. speen, 18 pages.

CLASS: 63 I

161133

Int. Cl.: H 02 p 9/00.

"A GENERATOR IN COMBINATION WITH A CONTROL APPARATUS FOR SYNCHRONIZING THE FREQUENCY OF CURRENT PRODUCED BY SAID GENERATOR TO THE FREQUENCY OF ELECTRICAL CURRENT IN A GRID".

Applicant: UOP INC., A CORPORATION ORGANIS-FD IN THE STATE OF DELAWARF, WITH ITS PRINCIPAL PLACE OF BUSINESS AT TEN UOP PLAZA, ALGONOUIN & MT. PROSPECT ROADS, DES PLAINES, II L'INOIS 60016, U.S.A.

Inventor: CHARLES EUGENE WOOD,

Application for Patent No. 213/Del/84 filed on 7th March, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

### 1 Claims

A generator in combination with a control apparatus for synchronising the frequency of electrical current produced by said generator to the frequency of electrical current in a grid connected to said generator, said generator being mechanically driven by an expander in turn being driven by a gas stream conveyed to said expander by an inlet pipeline connected to said expander an outlet pipeline connected to said expander any said gas stream from expander said control apparatus being characterized by:

- (a) a first by-pass pipeline, which connects said inlet pipeline to said outlet pipeline, and which communicates with said unlet pipeline upstream of said expander and communicates with said outlet pipeline downstream of said expander;
- (b) a second by-pass pipeline, which connects said inlet pipeline to said outlet pipeline, at locations in said inlet and outlet pipelines adjacent to the locations where said first by-pass pipeline is connected;
- (c) a third by-pass pincline which connects said inlet nineline to said outlet nineline, at location in said inlet and outlet ninelines adjacent to the locations where said second by-pass pincline is connected;
- (d) an expander control valve, which is located in said inlet vipeline downstream of the locations where said first second and third pipelines are connected to said inlet pipeline;
- (e) a hand control valve, which is located in said inlet pipeline between the locations where said first first and second by-pass pipelines are connected to said inlet nipeline;

- (f) a first control valve, which is located in said first by-pass pipeline;
- (g) a second control valve, which is located in said second by-pass pipeline;
- (h) a third flow control valve, which is located in said third by-pass pipeline;
- (i) a hand controller connected to said hand control valve for adjusting the position of said hand control valve;
- (j) a first pressure controller connected between said first by-pass pipeline and said first control valve for sensing the pressure in said first by-pass pipeline upstream of said first control valve and transmitting to said first control valve a signal which varies in relation to said sensed pressure;
- (k) a second pressure controller connected to said second control valve and said third control valve, said second pressure controller sensing pressure in said inlet pipeline at a location upstream of locations where said first, second and third by pass pipelines are connected to said inlet pipeline and which generates an output signal which varies in relation to said sensed pressure;
- (1) an electric governor connected to said second pressure controller and said expander for receiving input signals comprising said output signal from said second pressure controller a signal from said expander which is representative of expander speed, and an output signal from a synchronizer, which provides an output signal to said expander control valve, said synchronizer being connected to said generator, said expander and said electric governor, said synchronizer receiving an input signal representative of said grid frequency which generates an output signal related to the difference between said two input signals and which generates an output signal to cause the power produced by said generator to flow into said grid.

Compl. specn, 17 pages.

Drg. 1 sheet

CLASS: 132D & 195B Int. Class: F16k 19/00 & F24h 1/00

161134

"A SEQUENTIALLY CONTROLLED WATER MIXER".

Applicant: ARCU ARMATURINDUSTRI AB., a Swedish Joint Stock Company. of Box 64, S-36075 Alstermo, Swden,

Inventor: GOSTA HAMMARSTEDT.

Application for patent No. 214/Del/84 filed on 7th March, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

### ( 8 claims )

A sequentially controlled water mixer comprising a valut housing with a cold water inlet, a hot water inlet and a common outlet, said housing defining a mixing chamber between said inlets and outlet and a regulating chamber located on the inlet side of said mixing chamber, and a rotationally adjustable regulating switching value house in the regulating chamber, said switching value having regulating opertures in connection with said inlets, said value being adjustable to scal-off the inlets or to control flow from the inlets through said appertures, characterised in that:

said inlets are provided with recessed holes to receive inlet pipe connections;

2-277 GI 87

- a compression spring and a seal being accommodated in each said hole;
- said scal having a sealing area which engages said switching value and follows the contour thereof when said seal is loaded into contact with said switching value by said compression spring;
- said sealing area having a through hole for the water inlet and peripheral holes for retaining a lubricant inserted therein;
- nt least one operating member set relative to said switching value on said value housing; and
- a mounting means for mounting said value housing, said mounting means being provided with holes to receive said inlet pipe connections from said value housing and connect them to cold and hot inlet pipes; said mounting means being also provided with seals for sealing the inlet pipe connections with the mounting means.

Compl. spec. 13 pages,

Drg. 5 streets

CLASS: 126 A.

161135

Int. Class: H03k 3/00 & 23/00.

"A DIGITAL SINE AND COSINE NUNCTION GENERATOR FOR USE IN ELECTRONIC INSTRUMENTS WHICH REQUIRES DISCRETE FREQUENCIES".

Applicant: COUNCIL OF SCIENTIFIC AND INDUST-RIAL RESEARCH, RAFI MARG. NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORAT-ED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors: GIRIJA GOPALARAT NAM & RENUKA-DEV! MALLIKAR JUNIAH.

Application for Patent No. 313/Del/84 filed on 10th April, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

### 2 claims

An improved digital sine and cosine function generator for use in electronic instruments for the generation of discrete frequencies, which comprises a read only memory (1) which stores h values of cosine function or 2h values of sine function, where h is the number of increments of time delay of the read only memory, the said read only memory being connected to an address counter (2) for addressing the counter which is connected to two NAND gates (10 & 11) which are connected to a control flip flop (12) and also to decoders (13 & 14), the outputs of the read only memory being connected to multi input NAND gates (5, 6, 7) the input of the NAND gates also being adapted to be connected to a decoder (9) the outputs of the NAND gates being connected to the electronic instrument requiring discrete frequencies (15) the decoder being connected to a r counter (3) which always counts down the r counter being concected to a number counter (4) for counting the consecutive mean r value of a control counter (8), the control counter (8) being connected to said number counter (4) and to said r counter (3) to supply the r value to the r counter (3) whereby cosine and sine functions are generated with only h values of cosine function or 2h values of sine function respectively of desired frequency.

Compl. Specn. 14 pages. Drgs. 3 sheets.

CLASS: 68 D.

161136

Int, Class: G08b 21/00.

"DETECTION SYSTEM FOR DETECTING BY CAPACITIVE CURRENT MEASUREMENT THE PROXIMITY OF AN OBJECT TO ELECTRICAL POWER LINES".

Applicant: HYDRO QUEBEC, OF 75 DORCHFSTER BOULEVARD WEST, MONTREAL, QUEBEC. CANADA H37 144, CANADIAN COMPANY.

Inventors: MARIUS CLOUTIER, JEAN MARC BOUR-GEOIS & FRANÇOIS LALONDE.

(Application for Patent No. 315/Del/84 filed on 10th April, 1984.

Convention date 25th July, 1983, 433141/(Canada).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

#### 4 claims

A detection system for detecting by capacitive current measurement the proximity of an object to an alternating current power electrical line which creates a resulting electric field, said system comprising a receiver antenna capable for receiving a current by capacitive effect;

a measuring and conditioning circuit connected to said antenna in close proximity thereto, said measuring and conditioning circuit converting a received current to a coded signal, said measuring and conditioning circuit having a low input impedance due to measuring capacitive currents and the capacitance between said line and said antenna, said antenna being spaced from its supporting structure so that the influence of leakage through said supporting structure is considerably reduced and does not measurably affect the measurements of said impedance measurement device, said masuring and conditioning circuit being connected to control circuit toconvert the measured signal to a coded signal;

alarm means connected with said measuring and conditioning circuit to generate an alarm signal when the said coded signal reaches predetermined stored values.

Compl. Specn. 16 pages, Drgs. 2 sheets.

CLASS: 194Cs.

161137

Int. Class: H011 15/00.

"A PHOTOVOLTAIC DEVICE FOR PROVIDING FN-HANCED OPEN CIRCUIT VOLTAGE FORMED FROM MULTIPLE LAYERS OF SEMICONDUCTOR ALLOYS DEPOSITED ON A SUBSTRATE".

Applicant: ENERGY CONVERSION DEVICES, INC. A DELAWARE CORPORATION HAVING A PLACE OF BUSINESS AT 1675 WEST MAPLE ROAD, TROY, MICHIGAN 48084, U.S.A.

finventors: RALPH MOHR & VINCENT DAVID CANNELLA.

Application for Patent No. 326/Del/84 filed on 16th April, 1984.

Appropriate office for opposition proceedings (Rule 4. Patents Rules, 1972) Patent Office Branch, New Delhi-5.

### 19 claims

A photovoltaic device for providing enhanced open circuit voltage formed form multiple layers of semiconductor alloys deposited on a substrate wherein each of said semiconductor alloys has a band gap, said device comprising:

a pair of doped semcionductor alloy layers deposited on said sub-trate and an intrinsic semiconductor alloy body deposited between aid doped semiconductor alloy layers;

said intrinsic body having a first intrinsic layer of a semiconductor alloy and an open circuit voltage enhancement means comprising at least a second intrinsic layer of semiconductor alloy said second instrinsic layer of semiconductor alloy having a wider gap than the band gap of said first intrinsic layer for enhancing the open circuit voltage of said device. said second intrinsic layer being disposed between said first intrinsic layer and one of said doped layers.

Compl. Speen. 28 pages. Drgs. 3 sheets.

CLASS:10B.

161138

Int. Cla's: F 42C 1/12.

"IMPROVED IMPACT-DETONATED TIME DELAY FUSE FOR HAND GRENADE".

Applicant: ANTHONY MARIO CARUSO, A U.S. CITIZEN, OF 1620 DALLAS STREET, AURORA, COLORADO 80010, U.S.A.

Inventor: ANTHONY MARIO CARUSO.

Application for Patent No. 354. Del/1984 filed on 25th April, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

#### 8 claims

An improved impact detonated time-delay fuse for hand grenade comprising an elongated hollow-cylindrical fuse body (10) having a primer bore (12) penetrating said body at one end thereot, a detoimable ring (13) circumscribing said primer bore (12) and crimped over said bore, a flame passage (20) in said fuse body, an expansion chamber (21) in said fuse body in gaseous communication with said primer bore (12) through said flame passage (20), an annular recess (22) in said fuse body to terminate said expansion chamber (21) and to provide a stop, a delay charge housing (23) having one longitudinal end bearing against said stop, a detonating charge cannister (26) in direct abutting engagement with another longitudinal end of said delay charge housing (23), said cannister having an aperture (27) in longitudinal alignment with said delay charge housing (23) and in gaseous communications therewith, an initiating charge (31) adjacent to said cannister aperture (27), a detonating charge (31) adjacent to said cannister (26) for activation by said initiating charge 31); said fuse having a deformable end (33) of said fuse body (10) crimped over said detonating charge cannister (26) in order to retain said cannister (26) and said delay charge housing (23) within said fuse body, said fuse being characterised in that said delay charge housing (23) comprises an undercut longitudinal outer surface thereof to establish a thermal barrier (37) between said delay charge housing (23) and said fuse body (10) and a pair of longitudinally spaced beads (41, 42) at opposite ends of said delay charge housing (23) to establish gas checks between said delay charge housing (23) to establish gas checks between said delay charge housing (23) and said fuse body (10).

Compl. Specn. 17 pages, Drg. 1 sheet.

CLASS: 172D4 Gr. (XX)

161139

Int. Cl.: B65h-69/06, D0lh -15/00.

Applicant: W. SCHLAFHORST & CO., A LIMITED PARTNERSHIP REGISTERED UNDER THE LAWS OF FEDERAL REPUBLIC OF GERMANY OF BLUMENBERGER STRABE 143/145. D-4050 MONCHENGLADBACH 1, POSTFACH 205, FEDERAL REPUBLIC OF GERMANY.

Inventor: WOLFGANG IRMEN.

Application No.: 241/BOM/1984 Filed on 31st August, 1984.

Appropriate office for opposition proceedings (Rule 4, Patent Office, Bombay Branch.

### 4 claims

Pneumatic yarn splicing device for the production of a knotfree yarn joint by means of splicing provided with a splicer head having at least one inlet for the injection of compressed air, taking the yarn ends to be spliced together and allowing the entanglement, interlocking, interminging and/or interwining of their fibres with one another, ad also provided with pneumatic holding devices arranged on either side of said sollting head, each with one tubular inlet, for holding the respective yarn ends of the yarn to be spliced together during the time of the yarn preparing process, characterized by the inlet mouth (33) of the pneumatic holding device (15) being provided with inserting aids for the yarn ends (34%, 35%) shaped as accesses (36, 37) and/or elevations of varying depth and of limited extent.

Comp. Specii. 7 pages. Drgs. 2 sheets.

CLASS : 201+C [H(4)]

161140

161142

Int. Cl.: CO 2 b-3/06.

A NOVEL DEVICE FOR CHEMICAL TREATMENT OF WATER.

Applicant: SCITECH CENTRE, FORMERLY KNOWN AS MANEKLAL SCIENTIFIC RESEARCH FOUNDATION, OF 131, KANDIVLI INDUSTRIAL ESTATE, KANDIVLI (WEST), BOMBAY-400 067, MAHARASHTRA, INDIA

Inventor: MEGHASHYAM NARHARI BHAWE.

Application No. 353/Bom/1984 filed on December 20, 1984.

Complete after Provisional left on March 19, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-400 013.

#### 6 Claims

(1) A device for Chemical treatment of water comprising a single or multiplece container made a water soluble material such as herein described of desired capacity filled in with predetermined quantity of water treatment Chemical agents such as herein described, said containers being sealed/covered in known manner to make it tamper and leak-proof.

Provisional specification 4 pages.

Drg. 1 sheet

Compl. specn. 6 pages.

Drg. Nil

CLASS: 140 A

161141

Int. Cl.: C 10 m-1, 08.

A METHOD OF MANUFACTURING FREE FLOWING LIQUID LUBRICANT FOR PRE-LUBRICATING FIBRE CORE OF STEEL WIRE ROPE.

Applicant & Inventor: SIDDHARATH JHAWAR AND ANURAG JHAWAR BOTH INDIAN NATIONALS, RESIDING AT C/o, MR. S.C. TAPURIAH, FLAT NO, 4A, 11 PALAZO, LITTLE GIBBS ROAD, BOMBAY-400 026, MAHARASHTRA, INDIA.

Application No. 10/Bom 1985 filed on Jan. 1985,

Comp. after Prov. leit on Apr. 8, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-400 013.

### 3 Claims

A method of manufacturing free flowing liquid lubricant having high flash point of 200°C to 300°C, for pre-lubricating fibre core of steel wire rope according to this invention comprises of the steps of:

- (i) mixing petroleum oils having viscosity within the range of 500 to 100 RVI (Redwood Viscosity Index) at 40°C, which is equivalent to 29.9 to 32.7 Cs (Cenlistrokes i. e. Kinetic Viscosity Index of petroleum oils) with bitumen of 180 to 210 penetration grade as per ISI Specification and stirring the mixture at temperature above 80°C below 200"C, till homogenous mixture is obtained;
- (ii) adding phenolic or chlorobenzene compounds such as dishlorophenol, orthophenylphenol, para-chlorophenol, and/or penta-chlorometacresol to the hot mix of step (i) and stirring continued till homogenous free flowing liquid is formed;
- (iii) adding slack wax having 55% oil content to the mixture of step (ii) and stirring continued at temperature above 80°C, for about 20 minutes and allowing the blended free flowing liquid to cool down to room or embient temperature.

Prov. speen, 9 pages.

Drg. Nil

Compl. specn. 11 pages.

Drg. Nil

CLASS: 62 C2, XXII Int. (il. : DO 6 p 1/32.

IMPROVEMENTS IN OR RELATING TO THE METHOD OF ANILINE BLACK DYEING OF COTTON TEXTILE FABRIC. THE

Applicant: THE CENTURY SPINNING & MANUFACTURING COMPANY LIMITED. CENTURY BHAVAN, DR. ANNIE BESANT ROAD, BOMBAY-400 025, MAHA-PASHTDA 10014 RASHTRA, INDIA.

Inventor : HARIVADAN AMRITLAL ANJANI KUMAR PRASAD. SHAH AND

Application No. 104/Born, 1985, filed on 22nd April, 1985.

Complete after Provisional left on 25th September, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-400 013.

An improved batchwise method of aniline black dyeing of cotton textile fabric comprising the following steps:

- (a) padding the cotton textile fabric with a padding solution consisting of aniline oil, hydrochloric acid, sodium chlorate, copper sulphate and water;
- (b) drying the fabric, preferably, on drying cylinders at a temperature between 100 to 110"C;
- (c) developing bottole green colour on the fabric by winding the fabric wound on batching rolls in enclosed chambers provided with humidilier(s) at ambient temperature and humidity between 50— 65%;
- (d) chroming the fabric with an acidified aqueous solution of sodium bichromate or potassium mate at a temperature between 50—60"C; bichro-
- (c) washing the fabric with water;
- (f) soaping the fabric with soap and soda and ash;
- (g) washing the fabric with water; and
- (h) drying the fabric, preferably, on drying cylinders at a temperature between 100—110°C to ob ain ungreenable jet black.

Provisional specification 4 pages.

Drg. Nil

Compl. specn, 9 pages.

Drg. Nil

CLASS: 62 C 2

161143

Int. Cl.: D 06 p 1/32.

IMPROVEMENT IN OR RELATING TO THE METHOD OF ANILINE BLACK DYFING OF COTTON TEXTILE

Applicant: THE CENTURY SPINNING & MANUFACTURING COMPANY LIMITED OF CENTURY BHAVAN, DR. ANNIE BESANT ROAD, BOMBAY-400025, MAHA-RASHTRA, INDIA.

Inventors: HARIVADAN AMRITLAL SHAH AND ANJANI KUMAR PRASAD.

Application No. 106/Bom '1985 filed on April 22nd, 1985.

Complete specification after provisional left on September 25th. 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-400 013.

### 3 Claims

An improved batchwise method of anline black dyeing of cotton textile fabric comprising the following steps:

(a) padding the cotton textile fabric with a padding solution consisting of aniline oil, hydrochleric acid, sodium chlorate, copper sulphate and water in association or combination with a catalysing agent such as herein described.

- (b) developing bottle green colour on the fabric by winding the fabric on batching and storing the fabric wound on batching rolls in enclosed chamber provided with humidifier(s) at ambient temperature and a humidity between 50—65%.
- (c) chroming the fabric with an acidified aqueous solution of sodium bichromate or potassium bichromate at a temperature between 50—60"C;
- (d) washing the fabric with water;
- (e) soaping the fabric with soap and soda ash;
- (f) washing the fabric with water; and
- (g) drying the fabric, preferably, on drying cylinders at a temperature between 100—110"C to obtain ungreenable jet black.

Provisional Specification 6 pages.

Drg. Nil

Compl. speen, 11 pages,

Drg. Nil

CLASS: 85 J

161144

Int. Cl.: F 27 d-17/00.

A METHOD AND AN APPARATUS FOR BATCH PRE-PARATION AND FEEDING INTO SMELTING PROCESS.

Applicant: OUTOKUMPU OY A FINISH JOINT-STOCK COMPANY, OF TOOLONKATU 4. 00100 HELSINKI, FINLAND.

Inventors: 1. MATTI ELIAS HONKANIEMI, 2. LAURI ANTERO MUSTIKKA, 3. MARTTI JOHANNES HANK-KILA, 4. PENTTI OLAVI HOKKANEN, 5. RISTO MARKUS HEIKKILA & 6, LAUNO LEO LILJA.

Application No. 143 Bom/1985 filed on June 5, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-400 013.

### 10 Claims

A method for preparing a feed mixture (4), to be fed into a smelting furnace, at one stage characterised in that the feed mixture (4) which is mixed in correc, proportions and homogenized, is conducted by means of a suitable distribution device into the upper part of a pretreatment silo (6), onto the surface of the feed mixture bed contained in the said silo; that the feed mixture bed is made to settle down, first in a uniform flow and later divided into several sub-flows (33), which are made to converge in roughly conical form and finally to continue as cylindrical feed flows (8) onto the surface of the bed located in the smelting furnace (9) placed below the pretreatment silo (6); and that from he middle of he feed mixture bed sub-flows, hot inert gas is conducted he feed mixture bed in countercurrent with respect to the flowing direction of the feed mixture, and that the said gas is conducted to the conically convergent region of the sub-flows at such a speed that even partial fluidization of the feed mixture is prevented, and the gases are made to rise through the feed mixture bed and are recovered at the upper part (41) of the pretreatment silo, advantageously at several different spots.

Compl. specn. 19 pages.

Dres. 2 sheets

CLASS: 160 D

161145

Int. Cl.: B 60 g—11/00.

A PROGRESSIVE SUSPENSION MEANS FOR SINGLE AXLF TRAILER AND THE LIKE.

Applicant: MAHINDRA OWEN LIMITED. AN INDIAN COMPANY HAVING ITS REGISTERED OFFICE AT, 155, BOMBAY PUNE ROAD, PIMPRI, PUNE-111-018, MAHARASIITRA, INDIA.

Inventor: RAULF AUGUSTO NORONHA.

Application No. 204/Bom/85 August 6, 1985.

Complete after provisional left on September 2, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-400 013.

#### 3 Claims

A progressive suspension means for single axle trailer and the like comprises:

- a chasis having a single axle at its rear end mounted with a Right-hand and a Left-hand U-bolts along with a pair of spring pads enclosing therebetween;
- a Right-hand and a Left-hand leaf spring stacks which are supported between a front and a rear Right-hand and Left-hand leaf spring hanger brackets; each having a curvilinear seat at its top in contact with

open ends of respective leaf spring stacks;

each of said U-bolts is having supplementary bracket for securing thereto one end of a Right-hand rigid and a Left-hand adjustable torque arm assemblies the other end of respective torque arm assemblies being secured to said front Right-hand and Left-hand leaf spring hanger brackets through the rubber bushes which are linked to each other by a transvers pipe/brace;

the arrangement being such that under laden condition the point of contact for open ends of respective leaf spring stacks shifts from point 16 shown in Figure-1 to point 17 shown in Figure-3 of the drawings accompanying the provisional specification decreasing the span length of respective leaf spring stacks thereby higher stiffness for leaf spring stacks is achieved and the provision of rigid torque arm assembly and adjust able torque are assembly for respective Right-hand and Left-hand leaf spring hanger brackets hold and maintain the axle in fully aligned position with respect to trailer chassis under varied load and road profile conditions.

Provisional specification 5 pages.

Drg. 3 sheets

Compl. specn. 6 pages.

Drg, Nil

CLASS: 160 D

161146

Int. Cl. ; B 60g—11/00, 11/04, 11/10.

PROGRESSIVE TANDEM SUSPENSION MEANS FOR DUAL AXLE TRAILERS AND THE LIKE.

Applicant: MAHINDRA OWEN LIMITED, AN INDIAN COMPANY HAVING ITS REGISTERED OFFICE AT 155, BOMBAY -PUNE ROAD, PIMPRI, PUNF 411 018, MAHARASHTRA, INDIA.

Inventor: RAULF AUGUSTO NORONHA.

Application No. 205/Bom/85 filed on August 6, 1985.

Complete after Provisional left on September 2, 1986.

Appropriate office for opposition proceedings (Rule 4 Patents Rules, 1972) Patent Office Branch, Bombay-400 013.

### 4 Claims

Progressive tandem suspension means for dual axle trailers and the like comprises:

- a trailer chassis having dual axles, two pairs of front and rear Right-hand and Left-hand leaf spring hanger brackets fixed near the rear end of said chassis and a pair of equalised brackets provided in-between the said front and rear pair of hanger brackets, pipe braces inter-connecting the said front hanger hrackets and said equaliser brackets;
- equaliser shaft mounted on rubber bushes fitted to said equaliser brackets;
- a pair of supplementary torque arm brackets mounted on each of said dual axles;

a pair each of rigid and adjustable torque arm assemblies provided on Right-hand and Left-hand side of the chass's respectively;

each pair of which is secured in tandem between front leaf spring hanger bracket and said supplementary torque arm bracket of front axle and in-between equaliser bracket and supplementary bracket on rear axle, and two pairs of open ended leaf spring assemblics mounted on respective U-bolts on dual axles and secured thereto by leaf spring anchor pads;

wherein the open ends of respective leaf springs slide into respective leaf spring hanger brackets and equaliser brackets under laden condition (as shown in Fig. 3) and the stiffness of the leaf spring increases with corresponding decrease in span length of respective leaf spring assembly thereby giving higher stiffness for leaf springs and wherein said equaliser brackets transfer load from one leaf spring assembly to another on same side thereby equalising excess load for all varied conditions of load and road profile.

Prov. speen. 6 pages.

Drg. 3 sheets

Compl. specn. 3 pages.

Drg. Nil

CLASS: 24 A

161147

Int. Cl. : B 60 t-7/20, 13, 02, 13/08.

AUTOMATIC MECHANICAL OVER-RUN BRAKE ASSEMBLY FOR TRAILER AND THE LIKE.

Applicant: MAHINDRA OWEN LIMITED, AN INDIAN COMPANY HAVING ITS REGISTERED OFFICE AT 155 BOMBAY-PUNE ROAD, PIMPRI, PUNE-411 018, MAHARASHTRA, INDIA.

Inventor: RAULF AUGUSTO NORONHA.

Application No. 207/Bom 85 filed on August 6, 1985.

Complete after provisional left on September 2, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

### 9 Claims

Automatic mechanical over-run brake assembly for trailer and the like comprising a slidably mounted tow eye-cumbuffer working within a bush sleeve provided at front end of a tow bar centrally mounted on a pivot at front end of a turntable mounted on a hollow pivot bolt at front end of a trailer chassis, said turntable having a front axle with wheel hubs at front end of said chassis and said trailer chassis having a rear axle with wheel hubs, each hub having known type of mechanically operated grake drum means and fitted with pneumatic or steel tyred wheels, said bush/sleeve being sandwitched between a tow eye return spring and a buffer spring, said tow eye-cum-buffer being linked to a pivotally mounted level provided immediately behind said buffer spring, said lever being linked to link mechanism of said grake means by a brake cable passed over and through a pair of pullevs and said hollow pivot bolt on said trailer chassis one of said pulleys being mounted on said turntable and the other on front end of said trailer chassis, and said link mechanism of said brake means being provided with brake return spring which gets tensioned when brakes are applied to the wheel hubs on rear axle and which attain normal state when brakes are released from wheel hubs.

Provisional Specification 4 pages.

Drgs. 2 sheets

Compl. specn, 10 pages.

Drg. Nil

CLASS: 32 B IX(1) -77 C XI(1)

161148

Int. CI.: C 07 b' 100, C 11 c-3/12,

AN IMPROVED PROCESS FOR HYDROGENATION REACTION USING IMPROVED NICKEL UPON ALUMINA CATALYST.

Applicant: HINDUSTAN LEVER LIMITED, A COMPANY INCORPORATED UNDER THE LAWS OF INDIA, OF HINDUSTAN LEVER HOUSE, 165-166 BACKBAY RECLAMATION, BOMBAY-400 020, MAHARASHTRA, INDIA.

Inventor: CORNELIS MARTINUS IOK. DRIK VERZIJL AND JACON VAM DIJK.

Application No. 275/Bom/1985 filed on Oct. 7, 1985.

Divisional to Application No. 157 Bom/83 dated 5-5-1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

### 5 Claims

A process for hydrogenation of fatty material such as herein described which comprises contacting hydrogen and said fatty material in presence of nickel upon alumina catalyst said catalyst being a nickel upon transition alumina catalyst, containing 5 to 40% (w/w) of nickel characterised in that the catalyst has an active nickel surface between 80 and 300 m<sup>4</sup>/g Ni and in which the nickel crystallites have an average diameter of 1 to 5 nanometers.

Compl. specn. 9 pages.

Drg. Nil

CLASS: 32 F., (b)

161149

Int. Cl.; C 07 d-33: 00.

"A PROCESS FOR PREPARING CARBOSTYRYLOXI-MINOPROPANOLAMINES".

Applicant: LABORATORIES P.O.S. OF 68240 KAYSERSBERG, FRANCE, A FRENCH COMPANY.

Inventors: GUY ANDERMANN, GERARD LECLERC AND NOURDINE AMLAILY.

Application for Parent No. 48/Del/1984 filed on 17th January 1984.

Appropriate office for opposition proceedings (Rule 4 Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

### 3 Claims

 ${\bf A}$  process for preparing carbostyryloximinopropanolamines of general formula  ${\bf A}$ 

$$C = N - 0 - CH_2 - CH_2 - NH - R_3$$
 $C = N - 0 - CH_2 - CH_2 - NH - R_3$ 
 $C = N - 0 - CH_2 - CH_2 - NH - R_3$ 
 $C = N - 0 - CH_2 - CH_2 - NH - R_3$ 

wherein R is a hydrogen atom or an alkyl radical containing between 1 and 3 atoms of carbon; R<sub>2</sub> is a hydrogen atoms or an alkyloxy, aryloxy radical containing between 1 and 10 atoms of carbon and which may be aliphati or armatic; and R<sub>3</sub> is an alkyl or arylalkyl radical, which may be substituted, con aining between 2 and 30 atoms of carbon and which may be linear or branched, aliphatic or aromatic which process

of formula B

comprises reacting 5-acetyl R<sub>1</sub> R<sub>2</sub> derivative of a compound

wherein R<sub>1</sub> and R<sub>2</sub> have the meaning defined above said methylketone oxime is then coverted into a corresponding 3(5-carbostyrylmethylketone oxime) 1, 2-epoxypropane of formula D

wherein R<sub>1</sub> and R<sub>2</sub> have the meaning defined above by being treated with epibromhydrin and the resulting compound of formula D of the drawings is further reacted with a amine, R<sub>3</sub> NH<sub>2</sub> wherein R<sub>3</sub> has the meaning defined above to produce said carbostyryloximinopropanolamines of formula A of the drawings which is if desired converted into acid addition salt by any know manner,

Compl. specn. 27 pages

Drgs. 7 sheets

CLASS:  $32 F_2$  (b)

161150

Int. Cl. : C 07 d-57/00.

A PROCESS FOR THE SYNTHESIS OF 3-SUBSTITU-TED-9H-PYRIDO (3, 4,-b) INDOLES.

Applicant: COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors: ANIL KUMAR SAXENA, SHIV KUMAR AGARWAL, BRIJESH MALVIYA, HARISH CHANDRA AND NITYA ANAND.

Application for Patent No. 189/Del/1984 filed on 29th February, 1984.

Divisional to 315/Del/1980 filed on 28th April, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

Process for the synthesis of 3-substituted-9H-pyrido-(3, 4,b)-indole of formula VI wherein R<sub>1</sub> is an alkyl group which comprises treating dl-methyl 1, 2, 3, 4-tetrahydro-9H-pyrido(3, 4-b) indole ester of formula III wherein R<sub>1</sub> has the meanof formula IV, subjecting the hydrazide to obtain a hydrazide of formula IV, subjecting the hydrazide to diazolization to obtain an azide of formula V and treating the azide with absolute ethanol in tetrahydrofuran to form the compound of the formula VI.

Int. Cl.; C 08 f 27 00.

CLASS: 32 E

161151

"A METHOD FOR THE PREPARATION OF NON AGGLOMERATING HOMOPOLYMPRS OF  $C_4$ - $C_7$  ISO-OLEFINS OR BUTYL RUBBER COPOLYMERS".

Applicant: EXXON RESEARCH AND ENGINFERING COMPANY, A CORPORATION OF DELAWARE, UNITED STATES OF AMERICA, CARRYING ON BUSINFSS AS A COMPANY FOR THE HOLDING OF PATENTS AND GRANTING LICENSES THEREUNDER, AND TECHNICAL DEVELOPMENT AND RESEARCH WORK AT 200 PARK AVENUE, FLORHAM PARK, NEW JERSEY, UNITED STATES OF AMERICA UNITED STATES OF AMERICA.

Inventors: KENNETH WILLIAM POWERS & RALPH HOWARD SCHATZ.

Application for Patent No. 239/Del 84 filed on 15th March, 1984.

Divisional to patent application No 535, Del 80 filed on 21st July, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

### 21 Claims

A method for the preparation of non agglomerating homopolymers of  $C_4$ - $C_7$  isoolefins or butyl subber copolymers which comprises polymerlsing in the presence of a lewis acid cationic polymerisation catalyst and in a polymerisation diluent of the kind such as herein described a mixture of the corresponding monomers, said mixture having incorporated therein a s'abilising agent which is a copolymer having a lyophilic portion soluble in said polymerisation diluent and a lyophobic portion insoluble in said polymerisation diluent, said latter portion being soluble in or adsorbable by the homopolymer or copolymer being produced.

Compl. specn. 64 pages.

Drgs. 3 sheets

CLASS: 33A & 129 G

161152

Int. Cl.: C22c 1/04.

AN APPARATUS FOR FORMING SHAPED ARTICLES OF A MFTAL OR ALLOY BY CASTING AND A PROCESS THEREFOR.

Applicant: CHIEF CONTROLLER, RESEARCH & DEVELOPMENT, MINISTRY OF DEFENCE, GOVERN-MENT OF INDIA, NEW DELHI, INDIA, AN INDIAN NATIONAL.

Inventor: GANTA SATYANARAYANA REDDY.

Application for Patent No. 372/Del'84 filed on 1st May, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

### 8 Claims

An apparatus for carrying out a process of forming shaped articles of a metal or alloy by casting comprising a non-magnetic die for receiving a molten metal or alloy. located within the stator of an alternating current motor, which stator is adapted to be connected to an electric power supply for applying an electromagnetic field to the molten metal or alloy in the die so as to cause rotation of the molten metal or alloy and a vertical ram disposed above the die and adapted to be lowered into the die for applying pressure to said molten metal or alloy.

Compl. specn. 10 pages.

Drg. 3 sheets

CLASS: 6B.,

161153

Int. Cl.: B01d 53/04.

PROCESS AND DEVICE FOR CLEANING OF GAS MIXTURES.

Applicant : BERGWERKSVERBAND C FRANZ-FISCHER-WEG 61, 4300 FSSEN GERMANY, A GERMAN COMPANY. GmbH.,

BURKHARD HARDER. BERNHARD STRICKER & KARL KNOBLAUCH.

Application for Palent No. 426/Del/84 filed on 21st May.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 5 Claims

Process for cleaning of gas mixtures (crude gas) by means of conventional pressure swing adsorption in which the crude gas flows through an adsorbent bed in an adsorption reactor, resulting in the adsorption of part of the gas components, and in which one or several gas components flow off at the end of the adsorbent bed with the crude gas stream being separated into a product and a residual gas stream, characterised by temperature regulation of the adsorption reactor by means of a heat exchanger medium in the temperature range of --20 to +40°C.

Compl. speen, 5 pages,

Drg. 1 sheet

CLASS: 40A<sub>0</sub>.

Int. Cl.: B01J-7/00.

161154

PROCESS AND APPLIANCE FOR THE PRODUCTION OF OXYGEN BY CATALYTIC DECOMPOSITION OF HYDROGEN PEROXIDE.

Applicant: INTEROX, A BELGIAN COMPANY, OF 33. RUE DU PRINCE ALBERT, B-1050 BRUSSELS, BELGIUM.

Inventors: PAUL COECKEI BERGHS, & WILLY DE-POORTER,

Application for Patent No. 487/Del/84 filed on 14th June, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005,

### 10 Claims

A continuous process for the production of oxygen by catalytic decomposition of hydrogen peroxide comprising introducing an aqueous solution of hydrogen peroxide into a reactor containing solid particles of a decomposition catalyst as herein defined for hydrogen peroxide in order to form a mixture containing oxygen and water vapor, and the mixture thus obtained is cooled in a condensation zone, so as to form a guscous phase containing essentially oxygen so as to form a gaseous phase containing essentially oxygen and liquid phase containing essentially water which is removed characterised in that the positive difference between the pressure of the aqueous solution of hydrogen peroxide of the entrance to the reactor and the pressure of the gaseous phase containing essentially oxygen in the condensation zone at the outlet of the reactor is kept constant.

Compl. specification 19 pages.

Drg. 5 sheets

C! ASS : 146D & 167C

161155

Int. Cl.: B07d 11/00 & 13/00.

SORTING MACHINE.

Applicant: GUNSON'S SORTEX LIMITED. A BRITISH COMPANY OF 12TH FLOOR MOOR HOUSE, LONDONWALL, LONDON FC2Y 5HE, ENGLAND.

Inventors: WILLIAM STOREY MAUGHAN & HER-BERT FRAENKEL.

Application for Patent No. 488/Del/84 filed on 14th June, 1984.

Convention date 30th June, 1983/8317777/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 14 Claims

A sorting machine comprising:

means for causing a plurality of objects as herein defined to pass sequentially downwardly along a path extending past a plurality of spaced apart viewing zones to a separation zone in which relative separation is effected between desired and undesired objects; light sources on opposite sides of said path for directing beams of light to said viewing zones;

viewing means disposed to effect viewing of the objects passing through said viewing zones from opposite sides respectively of said path;

discriminator means connected to said viewing means for determining whether objects which have been so viewed are desired or undesired; and

object separation means connected to said discriminator means for effecting relative separation in the separation zone between said desired and undesired objects; said viewing means and light sources being so disposed that at the least the majority of the light reflected by an object and directed into a view means is derived from a light source disposed on the same side of said path as the respective viewing means.

Compl. specn, 21 pages.

Drg. 3 sheets

**CLASS: 173 B** 

161156

Int. Cl.: B05b 1/00.

LANCE FOR SPRAYING PARTICULATE REFRACTORY FORMING COMBUSTIBLE MATERIAL, PARTICULATE REFRACTORY MATERIAL AND A COMBURENT GAS.

Applicant: GLAVERBEL, A BELGIAN COMPANY. OF CHAUSSEF DE LA HULPE 166, B-1170 BRUXELLES, BELGIUM.

Inventors : ROBERT PLUMAT, PIERRE ROBYN & PIERRE DESCHEPPER.

Application for Patent No. 542/Del/84 filed on 4th July. 1984.

Convention date 30th July, 1983/18320631/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch. New Delhi-5.

### 15 Claims

A lance for spraying particulate refractory-forming combustible material, particulate refractory material and a comburent gas characterised in that said lance comprises at least one feed passage for conveying material to be sprayed at a lance head which comprises a plurality of spray nozzles for spraying such material, said spray nozzles being out of register with said passage or having their axis at an angle to the axis of said passage causing the path of flow of the material within said lance head to undergo a change of direction from said feed passage to said nozzles, a cuplike member provided within said lance head downstream of said at least one feed passage at approximately where the flow of said material changes direction, the recess of said cup-like member being open to said feed passage for catching particulate material conveyed along said flow path whereby the material so caught itself forms a barrier against abrasion at the location of said recess.

Compl. speen. 13 pages.

Drg. 4 sheets

CLASS: 40 H

161157

Int. Cl.: B 03 d 7/00.

"AN APPARATUS AND PROCESS FOR CONTI-NUOUSLY EXTRACTING EXTRACTABLE MATERIAL". Applicant: COLGATE PALMOLIVE COMPANY, A CORPORATION ORGANISED UNDER THE LAWS OF THE THE STATE OF DELAWARE, U.S.A., OF 300 PARK AVENUE, NEW YORK, NEW YORK 10022, UNITED STATES OF AMERICA.

Inventor: SALVATORE JOHN SILVIS.

Application for patent No. 551/Del/84 filed on 6th July, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

### 13 Claims

A continuous, unbaffled, extraction apparatus, usefule for extracting extractable material such as herein described from a liquid or particulate feed material with an extracting liquid such as herein described which is immiscible with the feed material and is in a different phase, which comprises: a hollow, vertical, cylindrical column first inlet means in an upper or lower part of the column for adding to the column a liquid or particulate feed material containing an extractable material to be extracted therefrom first outlet means for removing from the other such part of the column a raffinate of the feed material of a reduced content of the material to be extracted second inlet means for adding to the part of the column from which the raffinate is removed an extracting liquid which is immiscible with and of a different density from both the feed material and the raffinate, being heavier or lighter than both second outlet means for removing such extracting liquid, with extracted material therein, from the part of the column in which the feed liquid is added and movable contact promoting means in the column comprising a vertical shaft coaxial with the column which as rotationally oscillatable, means for oscillating said shaft and a contact promoting member held to the vertical shaft which is of screenlike, screen of woven structure having openings therein representing at least 60% of the area of said structure through which the immiscible phases can pass as said member moves horizontally and oscillatingly through said extraction zone, said contact promoting means imparting substantially only rotationally oscillating horizontal motion to the immiscible phases with a minimum of undesirable axial maxing in the extraction zone of the column. thereby faciliating mass transfer of the extractable material by mixing said phases, maximizing contact between the phases, causing changings of the shapes of the dispersed phase droplets, thinning any stagmant film and exposing renewed contact surfaces of said phases without causing tubulence, swirling or helical movement.

Compl. speen. 34 pages.

Drgs. 3 sheets

CLASS: 32 C

Int. Cl.: C 07 g 5/00.

161158

"AN IMPROVED PROCESS FOR THE ISOLATION OF SANGUINARINE AND DIHYDROSANGUIRINE FROM THE SEEDS OF ARGEMONE MEXICANA".

Applicant: COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG NEW DELHI-110 001, INDIA AN INDIAN REGISTRED BODY INCORPOPATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors: SHASHI BHUSHAN MAHATO & NIRANGAN PRASAD SAHU.

Application for Patent No. 403/Del/1985 filed on 15th May, 85.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

### 7 Claims

An improved process for the isolation of sanguinarine and dihydrosanguinarine from the seeds of Argomone maxicana which consists in extracting the seeds with an organic solvent, concentrating the extract. passing dry hydrogen chloride gas into the concentrated extract to precipitate out sanguinaring and dihydrosanguinarine hydrochlorides, filtering the pracipitate

and treating the precipitate with hot water (60°-90°C) to yield the dihydro sanguinarine basifying the filtrate with ammonium hydroxide to yield sanguinarine.

Compl. speen, 7 pages.

CLASS: 24 D<sub>3</sub>

161159

Int. Cl.; B 61 h 1/00 & B 60 t 13/00.

"A VEHICLE BRAKE SYSTEM HAVING A PARKING BRAKE INTERLOCKED WITH A SERVICE BRAKE".

Applicant: WESTINGHOUSE BRAKE AND SIGNAL COMPANY LIMITED, A BRITISH COMPANY, OF PFW HJLL, CHIPPENHAM, WILTSHIRE, ENGLAND.

Inventors: IVOR HENRY BUILL & JOHN DALF COLEMAN.

Application for Patent No. 66/Del/84 filed on 18th August, 1984.

Convention date 24th August, 1983/8322737/(U.K.).

Appropriate office for opposition proceedings (Rule 4. Patents Rules, 1972) Patent Office Branch, New Delhi-5.

#### 7 Claims

A vehicle brake system having a parking brake interlocked with a service brake such that the parking brake is released by a service brake application, comprising a parking brake and a fluid pressure operated service brake, the parking brake having a pressure inlet said pressure inlet being connected by means of a pneumatic line to a two-way valve means to provide to said parking brake a fluid pressure from said two-way valve means in opposition to the parking brake force, said two-way valve means occupying a first position, for normal running of a vehicle, in which it is connected to a source of substantially constant fluid pressure, and a second position in which, it is connected to an auxiliary source of fluid pressure said auxiliary source of fluid pressure being connected to and deriving fluid pressure from said service brake.

Compl. specn, 10 pages.

Drgs. 2 sheets

CLASS: 131 B.

161160

Int. Cl.: E 21 d 7/00.

"DEEP WELL SUCKER ROD PUMP".

Applicant: BAYER AKTIENGESFLLSCHAFT, A BODY CORPORATE ORGANISED UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY, OF LEVERKUSEN, FEDERAL REPUBLIC OF GERMANY, MANUFACTURERS.

Inventors: JURGEN HOFFMANN & LOTHAR PREIS.

Application for Patent No. 688/Del/1984 filed on 30th August, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

### 10 Claims

Deep well sucker rod pump in which a piston suspended to a system of sucker rods in a rising pipe is moved up and down in a pump casing at the bottom of the rising pipe by an above ground pump drive, characterised in that the sucker rod system comprises a plurality of unidirectionally reinforced composite fibre rods, which extend substantially parallel each other but are not in contact with each other and which each have a cross-sectional area of less than 1 cm² which remains the same over the whole length of said composite fibre rods.

Compl. specn, 10 pages. 3—277 G1/87

Drgs, 3 sheets

CLASS: 164 C & 80 C &G

161161

Int. Cl.: C 02 c 3/00.

"BELT PRESS".

Applicant: REXNORD INC., OF 350 N. SUNNY SLOPE HD, BROOKFIELD, WISCONSIN 53003, U.S.A.

Inventor: ROBERT EDWIN.

Application for Patent No. 718/Del/84 filed on 12th September, 84.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

#### 6 Claims

A belt press which includes a frame having a head end and a discharge end, a plurality of rolls, and a continuous belt which passes over said rolls, characterised in said belt press having a belt tensioning system, comprising:

first and second fluid actuators, one of said actuators located on each side of side belt;

first and second pistons, one of said pistons extending from each of said actuators;

said head end of said frame having longitudinally projecting members to which said actuators and pistons are mounted at an angle substantially parallel to the direction of travel of said belt;

- a belt tensioning roll mounted on said pistons in contact with said belt, the axis of said belt tensioning roll being perpendicular to the direction of travel of said belt;
- a plurality of pulleys rotatably fixed on said longitudinally projecting members of said frame; and
- a pair of cables, each of said cables being attached to both said first and second pistons and cooperating with said nulleys so as to provide means for compensating for the differences in force exerted by said pictons such that the pistons move together, thereby maintaining the angle between said belt tensioning roller and said belt as the pstons move in their respective cylinders.

Compl. specn. 32 pages.

Drgs. 5 sheets

161162

CLASS: 10 D

Int. Cl. : F 42 b 39/00.

"HOLDING DEVICE FOR FLONGATE CONTAINERS PARTICULARLY FOR AMMUNITION".

Applicant: MESSERSCHMETT ROLKOW BLOHM GESCHELLSCHAFT MIT BESCHRANKTER HAFTUNG, A COMPANY ORGANISED AND EXISTING LINDER THE LAWS OF FEDERAL REPUBLIC OF GERMANY OF 8000 MUNCHEN, PEDERAL REPUBLIC OF GERMANY.

Inventors: SIFGERIED ROTH, HELMUT MULLER & KIAUS BAUMGARTEN.

Application for Patent No. 734/Del/84 filed on 19th Serteber, 1984.

Convention date 18th July, 1984/8418355 (U.K.).

Appropriater office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

### 9 Claims

A holding device for elongate containers, particularly a holding device for ammunition comprising a tubular container housing a defence missile, the device having two holders which, at least partly, embrace the tube at the front and rear ends with an actuating device for opening and closing the holders, wherein each other comprises a lever mechanism with two opposed lever arms which are pivotable in a plane perpendicular to the longitudinal direction of the container and which carry checks to contact a tube and which in order to pivot between the open and the close positions are flexibly coupled through respective links to a drive bar which can be moved to

and fro in a longitudinal direction, on of the two links associated with each holder being spring loaded and variable in length, the drive bar for each holder being mounted so that it is movable during displacement in a direction transverse to the longitudinal direction, a locking means being connected to the drive for to secure said drive bar in a closed position of the tube holder.

Compl. specn. 16 pages.

Drgs. 2 sheets

CLASS: 129L

161163

Int. Cl.: B 21d 51|26, B 65d 7|36, B 32b 15/18, 1/02, 1/04.

A CONTAINER ASSEMBLING PROCESS FOR SEAMING TWO PARTS OF A METAL CONTAINER.

Applicant: GALLAY S.A., A FRENCH COMPANY, OF 166, RUE DU FG-SAINT-HONORE, 75008 PARIS, FRANCE.

Inventor: LUCIEN LE BRET.

Application for Pa'ent No. 767/Del/1984 filed on 1st October, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

### , 7 Claims

A container assembling process for seaming a container body and bottom of a metal container together, comprising the step of flanging the body and bottom edges and thereafter rolling and radially forcing the body and bottom edges around each other to form a seam having at least six layers of adjoining material of the edges of the body and the bottom, characterised by, prior to the flanging step, forming a hook shaped portion, in section, in the terminal part of the edge of the body or the bottom such that after the flanging step the hook shaped portion is oriented substantially axially of the body or he bottom, and also forming an annular depression in the same one of the body and bottom edges as the hook shaped portion and radially inwardly of the hook shaped portion and thereaf er carrying out the step of rolling and radially forcing the body and bottom edges until the same is completed.

Compl. specn. 15 pages.

Drg. 4 sheets.

CLASS: 72 C. D

161164

Int. Cl.: F 42b 1/02, 23/04.

HYBRID EXPLOSIVE UNIT.

Applicant: BRIND ANSTALT FUR INDUSTRIE PATENTE, A LIECHTENSTEIN COMPANY, OF FL-9495 TRIESEN, LIECHTENSTEN.

Inventor: JOSEPH MARER.

Application for Patents No. 781 / Del / 1984 filed on 8th October, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Pa'ent Office Branch, New Delhi-5.

### 6 Claims

A hybrid explosive unit comprising: a casing (2).

- an explosive charge (1) in the casing defining an upwardly facing hollow at the upper end of the charge:
- a dished element (5) lining the hollow;
- a hollow metal cylinder (4) embedded in the charge and extending through the centre of the dished element,
- a sheath (8) of iner: material associated with the cylinder; and

- a detonation point (7) characterised in that the sheath (8) completely surrounds the whole of the outer circumference of the metal cylinder (4) to form a continuous barrier between the cylinder (4) and the explosive charge (1) and between the cylinder (4) and the dished element (5);
- the barrier being effective to reduce the propagation velocity of the detonation wave within the metal forming the cylinder to no more than he speed of sound in that metal, and that a shaped body (3) of inert material is embedded in the explosive charge (1) across the lower end of the cylinder (4) with the detonation point (7) located below the shaped body (3):
- the shaped body (3) being of greater diameter than the cylinder (4) and being effective to attenuate and different the detonation wave impinging directly thereon from the detonation point so that the cylinder (4) and sheath (8) are ejected as a first projectile of high penetrating power, and the dished element (5) and shaped body (3) are ejected as a second projectile of high penetrating power which travels behind the first projectile on firing of the unit.

Compl. specn. 6 pages.

Drg. 2 sheets

161165

CLASS: 40 At

Int. Cl.: B01j 1/14.

REACTOR FOR CATALYTIC REACTION.

Applicant: TOYO ENGINEERING CORPORATION, OF 2-5, KASUMIGASEKI 3 CHOME, CHIYODA-KU, TOKYO, JAPAN. INCORPORATED UNDER THE LAWS OF JAPAN.

Inventors : JUN ZANMA, YOSHINORI NISHTMURA, MAKOTO SHIMAGAKI, HIROHISA UOZU. MORIHISA HIDAKI & KUNIO HIROTANI.

Application for Patent No. 869/Dell 84 filed on 15th November, 1984.

Appropriater office for opposition proceedings (Rule 4, Patents Rules 19722) Patent Officee Branch, New Delhi-110005.

### 21 Claims

A reactor wherein a gaseous feedstock contacts a solid catalyst and undergoes an evothermic reaction, and is thereby converted to a gaseous product, comprising:

an upright reactor vessel having a central vertical axis, said reactor vessel having an inlet for said gaseous feedstock and an outlet for said gaseous product;

- a shell-and tube-type heat exchanger centrally mounted in said reactor vessel coaxial therewith, said shell of said heat exchanger defining at least one vertically elongated compartment therein, the tubes of said heat exchanger passing through said compartment;
- a plurality of annual catalyst beds stacked vertically in said reactor vessel around and coaxial with mid heat exchanger, means for directing flow of a gas through each of said catalyst beds in a substantially radial direction, said catalyst beds being in communication with said heat exchanger so that a starting feedstock fed into said inlet of said reactor flows successively through a first catalyst bed, then through said compartment of said heat exchanger so that said gas contacts the exterior surfaces of said tubes, then through a second catalyst bed is allowed to pass alternatively through said heat exchanger and a plurality of said catalyst beds, and thereafter the thus formed rascous product is discharged from said outlet; and

means for flowing a coolant through the interiors of said tubes so that the gas discharged from said first bed is cooled in said compartment before fed into said second bed.

Compl. speen. 41 pages.

Drgs. 8 sheets,

CLASS: 40 B.

161166

Int. Cl.: B 01 j 11/34.

"A METHOD FOR MANUFACTURE OF A CATA-LYST FOR USE IN CATALYTIC STEAM REFORMING OF HYDROCARBONS".

Applicant: THE M. W. KELLOGO COMPANY, OF THREE GREENWAY PLAZA EAST, HOUSTON, TEXAS 77046. UNITED STATES OF AMERICA, AN AMERICAN COMPANY.

Inventors : HARRY PAUL LEFTIN & KASHINATH ZIPARU PATIL.

Application for Patent No. 873/Del/84 filed on 16th November, 1984, Ante dated to 25th May, 1981.

Divided out of Patent Application No. 330/Del/81 (156206)/filed on 25th May, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

#### 2 Claims

A method for manufacture of a catalyst which in unreduced condition consists essentially of;

from about 20 to about 50 weight percent of a Group VIII, fourth period metal oxide;

from about 10 to about 25 weight percent of one or more oxides of the lanthanons having atomic numbers 57 through 71; and

from about 25 to about 70 weight percent zirconium dioxide which comprises;

- (a) preparing a water solution of salts of a Group VIII, fourth period metal, one or more lanthanous, and zirconium selected from the group consisting of nitrates and acetates, in proportions calculated to yield the catalyst;
- (b) treating the water solution with a reagent selected from the group consisting of the hydroxides and carbonates of ammonia and sodium to form precipitates;
  - (c) at least partially drying the precipitates;
- (d) forming the at least partially dried precipitates into catalyst shapes; and
- (e) calcining the catalyst shapes at a temperature of from about 370°C about 760°C to produce mixed oxides catalyst.

Compl. specn, 29 pages.

CLASS: 50 D.

161167

Int, Cl.: F 24 d 19/00, F 02 b, 67/06.

"A MOTIVE MEANS FOR AN AIR CONDITIONING SYSTEM FOR BUSES AND LIKE VEHICLES".

Applicant: KIDAR NATH BABBAR, PROPRIETOR OF INTERNATIONAL REFRIGERATION CORPN. 7, NETAII SUBHASH MARG, NEW DELHI-110 002, AN INDIAN NATIONAL.

Inventor: KIDAR NATH BABBAR.

Application for Patent No. 920/Dcl/84 filed on 6th December, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

### 6 Claims

Motive means for an air conditioning system for a bus or like vehicle comprising an auxiliary internal combustion engine having an output shaft coupled directly to a refrigerant compressor, said output shaft coupled to a first auxiliary shaft through a first set of pulleys and a belt, a second auxiliary shaft coupled to said first auxiliary shaft through a second set of pulleys and belts, a plurality of fans mounted on said second auxiliary shaft for cooling of the condenser coils, the cooling coils of the air-conditioning sys-

tem being cooled by a fan driven by an electric motor supplied with power by an electric current generator of the vehicle.

Compl. specn. 10 pages.

Drgs. 2 sheets.

CLASS: 128-A.

161168

Int. Cl. : A 61, m. 29 02.

"A PROCESS FOR MAKING MEDICATED CERVI-CAL DILATORS".

Applicant COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH RAFI MARG, NEW DELHI-110001, JNDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors: NANDOO MAL KHANNA, JAGT PAL SINGH SARIN, SATYAWAN SINGH, RAGHWENDRA PAL, BACHU SRI SETTY, RIKHAB CHAND SRIMAL, VED PRAKASH KAMBOJ, BHOLA NATH DHAWAN,

Application for Patent No. 277/Del/85 filed on the 30th March 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

#### 9 Claims

A process for making medicated cervical dilators comprises encapsulating cylinderical rods or cores made from granulated *Plantago ovata* (Psyllium, Isapgol) seed husk, effervescent power and an abortificient in a cloth tube coated from inside with a fine layer of microcrystalline cellulose, carrying at one end of the tube 12 to 15 cm, long thread, followed by compressing the closed tube, drying packing in a sealed tube and sterilizing by known methods.

Compl. specn. 8 pages.

CLASS: 85-F & J; 127-G; 127-I

161169

Int. Cl.: F 23 h 13/08.

"A DRIVE SYSTEM FOR USE IN SAID ROTARY GRATE".

Applicant: THE DIRECTOR-GENERAL CEMENT RESEARCH INSTITUTE OF INDIA M-10, SOUTH EXTENSION PART II, NEW DELHI-110049, INDIA.

Inventors: DR, MOSAGRAHAR CHANDRASEKHARIAH VISVESVARAYA, 2. DR, JAI CHANDRA MISHRA, 3. SH, VINAY KUMAR JAIN, 4. SH, SUNDARESAN SUKUMAR, 5. SH. DABBIR DADRI NARAYANARAO, 6. SH. LAI GUOI KRISHNAMURTHY JANAKIRAMAN.

Application No. 751/Del/79 dated October 27, 1979.

Division of Application No. 125/Del/78 dated 14th February, 1978.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Delhi.

### 2 Claims

A drive system for rotary grate of a vertical shaft kiln comprising a kingshaft on which the rotary grate is mounted and is rotatable therewith, drive means coupled to an automobile type gear box, speed reduction means coupled to the outputshaft of the automobile type gear box, a worm gear box coupled to the outputshaft the said speed reduction means, a worm mounted on the outshaft of the worm gear box and a worm wheel engaging the said worm fixedly mounted on the king shaft.

Compl. speen. 6 pages.

Drg. 1 sheet,

CLASS: 80-E + I;  $140-B_2$ .

1060

161170

Int. Cl.; B 01 d 27/00, 29/00, 37/00; E 21 b 43/00.

"PROCESS FOR FILTRATION OF OIL AND GAS WELL TREATMENT FLUIDS".

Applicant: PALL CORPORATION, AT 30 SEA CLIFF ROAD, GLEN COVE NEW YORK 11542, UNITED STATES OF AMERICA.

Inventors: 1. HOWARD ABRAMS, 2. BARRINGTON TAREGETT ALLEN.

Application No. 1107/Cal, 82 filed September 24, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 21 Claims

A filtering process for obtaining a clear filtrate effluent from a turbid oil or gas well treatment fluid, such as coinpletion fluid, stimulation fluid or work overfluid contaminated with solid particulates comprised of drilling and formation debris having particle sizes in the range of from 0.1 to tion debris having particle sizes in the range of from 0.1 to 30 micrometers characterized in that the said treatment fluid is passed through a surface filter as herein described having an absolute pore rating of 40 micrometers or less at a flow density of from 0.05 to 0.5 gallons per minute per equare foot of tilter surface such that (1) initially at least a portion of said particulates is collected on the upstream surface of said surface filter and begins forming a filter cake with enhanced capability for removing particulates smaller than the absolute pore rating of said surface filter and (2) thereafter said treatment fluid is filtered through a filter composite of (i) said surface filter and (ii) said filter filter composite of (i) said surface filter and (ii) said filter cake, whereby a clear filtrate effluent substantially free of solid particulates having particle sizes in the range of from 0.1 to 30 micrometers or higher is obtained.

Compl. Specn. 47 pages.

Drg. 3 sheets.

CLASS: 31-C.

161171

Int, Cl.: G 23 c 17/00.

"BAFFLE SYSTEM FOR GLOW DISCHARGE DE-POSITION APPARATUS".

Applicant: ENERGY CONVERSION DEVICES, INC., OF 1675 WEST MAPLE ROAD, TROY, MICHIGAN 48084, UNITED STATES OF AMERICA.

Inventors: 1. PREM NATII, 2. KEVIN HOFFMAN, 3. TIMOTHY DEAN LAARMAN. KEVIN RICHARD

Application No. 1084. Cal/83 filed September 6, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 6 laims

A glow discharge deposition apparatus which comprises A glow discharge deposition apparatus which comprises at least two chambers operatively connected by a gas gate passageway, at least one process gas introduced into the first of said chambers for depositing a semiconductor layer onto a substrate travelling through said chambers and at least one other process gas different from the first chamber process gas, introduced into the second chamber, means for introducing an insert sweep gas adjacent the first chamber side of the gas gate passageway, means adapted to establish a unidirectional flow of sweep gas from the first chamber to the second chamber, said introducing means adapted to direct sweep gas across at least the layered surface of the direct sweep gas across at least the layered surface of the substrate and means adapted to substantially prevent back diffusion of process gases due to turbulent sweep gas flow.

Compl. Specn. 26 pages.

Drgs. 3 sheets.

CLASS: 25 - A+C+D; 35-A+C; 90-A+I; 104-E.

Int. Cl.: B 29 d 3 '02; C 03 b 37/10;

C 04 b 7/56, 7/08, 15/00, 29/04, 35/72.

A METHOD OF STRENGTHENING A PARTICULATE MATRIX AND A MATRIX STRENGTHENED THEREBY.

Applicant & Inventor : FRANK BRIAN MERCER, OF "KENOLBRI", MEINS ROAD, BLACKBURN, LANCASHIRE, ENGLAND.

Application No. 1446 Cal/83 filed November 23, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 24 Claims

A method of strengthening a particulate matrix such as herein defined, characterized by randomly embedding in the matrix a large number of generally flat pieces of flexible, open mesh structure without creating a substantial amount of extra void space in the marix, each piece having an aren which is small relative to the size of the matrix, and is less than 30,000 mm<sup>2</sup>, comprising more than one complete mesh opening, having tenaceous junctions or intersections, having a flexural recovery of at least 83% as determined by the standardised flexural test set forth herein, and having high dimensional stability in its large standard set. and having high dimensional stability in its plane.

Compl. specn. 4 pages.

Drg. 6 sheets

CLASS: 47-B: 85-K

161173

Int. Cl. : F 23 b 1/00; F 23 c 5/12; F 25 d 1/02.

A DEVICE FOR COMBUSTING A COAL-AIR MIX-TURE.

Applicant: FOSTER WHEELER ENERGY CORPORATION OF 110 SOUTH ORGANE AVENUE, LIVINGSTON, NEW JERSEY 07039, U. S. A.

Inventors: I. IOEL VATSKY, 2. EDMUND S. SCHIN-

Application No. 54/Cal/84 filed January 25, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 10 Claims

A device for combusting a coal-air mixture comprising a tubular member having an inlet end portion for receiving said mixture and a discharge end portion, and means extending between said end portions for separating said mixture into a first stream containing substantially coal and a second stream containing substantially air, said first stream discharging through said discharge end portion in a substantial axial direction and said second stream discharging from said tubular member in a substantially radial direction, a housing extending around said tubular member and defining therewith an annular chamber for receiving said second stream, said housing having a discharge end portion extending proximate to said discharge end portion of said tubular member so that said second stream discharges from said annular chamber in a combustion-supporting relation to said first stream.

Compl. specn. 16 pages.

Drg. 2 sheets

CLASS: 64-B<sub>L</sub>

161174

Int. Cl.: H. 01 p 5/00.

AN OPTICAL FIBER RECEPTION BLOCK OF RIGID MATERIAL FOR USE IN MANUFACTURING A COUP-LFR.

Applicants & Inventors: (1) GEORGES LE NOANE, OF KEROUGAN BRAS, 22700 TREGASTEL, FRANCE; (2) DANIEL BOSCHER, OF RESIDENCE "LES HUNIERS", 22700, PERROS-GUIRIC, FRANCE, (3) RENE LEMARER, OF KEROUGAN BRAS, 22700 TREGASTEL, FANCE.

Application No. 146/Cal/84 dated March 1, 1984.

Appropriate office for opposition proceedings (Rule 4. Patents Rules, 1972) Patent Office, calcutta.

#### 7 claims

An optical fiber reception block of rigid material for use in manufacturing a coupler, having a longitudinal plane of symmetry and a transversal plane of symmetry orthogonal to each other, formed by molding with an arcuate fiber receiving groove which opens through a first face of said block and extends along said longitudinal plane of symmetry, a first flat reference surface parallel to said longitudinal plane of symmetry and at a predetermined distance from said groove and a second reference surface perpendicular to said first and second planes of symmetry and at a distance from said groove substantially smaller than the size of said block along the intersection of said first and second planes of symmetry.

Compl. Specn. 15 pages. Drgs. 4 sheets,

CLASS 154-D.

161175

Int. Cl. B 41 f 31/00.

INKING MEANS FOR A ROTARY PRINTING MACHINE.

Applicant: VEB KOMBINAT POLYGRAPH "LAMBERZ" LEIPZIG, OF 7050 LEIPZIG, ZWE INAUNDORFER STR. 59, GERMAN DEMOCRATIC REPUBLIC.

Inventors: 1. JOHANNES BEHMEL, 2. GERHARD ZUBER.

Application No. 507/Cal/84 filed July 13, 1984.

Convention dated 29th December, 1983 (83 34 585) U. K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 3 claims

Inking means for a rotary printing machine, comprising a first ink distribution cylinder, two inking rollers contacting the first ink distribution cylinder and mounted to be pivotable about the axis therof, a second ink distribution cylinder arranged upstream of the first cylinder with respect to a direction of ink flow in the inking means, and interchangeable first and second coupling means to effect alternative direct coupling of the second cylinder respectively with the first cylinder and one of the inking rollers, the first coupling means comprising a single transfer roller positionable in contact with the two cylinders and the second coupling means comprising two mutually contacting transfer rollers, which are positionable in contact with respectively the second cylinder and said one inking roller and which are supported, at their ends by two support members mountable to be pivotable about the axis of the second cylinder, and crespective councting means positionable at each end of said one inking roller to connect axle means thereof with axle means of the adjacent one of said two transfer rollers.

Compl. Specn. 7 pages. Drgs. 2 sheets.

CLASS:  $32-F_1 - 32-F_2 b - 32-F_3 d$ .

161176

Int. Cl.: C 07 d 7/28.

PROCESS FOR PREPARING NEW DERIVAIVES.

Applicant: FIDIA, S.p.A., OF VIA PONTE DELLA FABRICA, 3/A, 35031 ABANO TERME (PADOVA), ITALY.

Inventors: 1. FRANCESCO DELLA VALLE, 2. AURI-LIO ROMEO.

Application No. 522/Cal/84 filed July 21, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, calcutta.

#### 5 claims

A process for the preparation of a coumarin compound of formula (1) of the accompanying drawings

wherein R, is halogen or a hydrocarbyl group having 1 to 7 carbon atoms; R<sub>0</sub> is hydrogen or a hydrocarbyl group having 1 to 7 carbon atoms; R<sub>0</sub> and R<sub>2</sub>, which may be the same or different each represent hydrogen, a hydrocarbyl group having 1 to 7 carbon atoms or phenyl; R<sub>0</sub> and R<sub>4</sub>, which may be same or different, each represents, a hydrocarbyl group having 1 to 7 carbon atoms or R<sub>0</sub> and R<sub>4</sub>, when taken together, may represent azirdinyl, morpholino, thiomorholino, pyrrolidino, piperidino, piperazino, hydroxypiperidino, hydroxy-ethylpiperidino, hydroxypiperazino or hydroxyethylpiperazino; and R<sub>0</sub> is hydrogen, a hydrocarbyl group having 1 to 7 carbon atoms, halogen, or a free or protected hydroxy group or a pharmaceutically acceptable salt thereof; which comprises subjecting a coumarin derivative of formula (II)

wherein Y is hydrogen and  $R_1$ ,  $R_3$ ,  $R_4$ ,  $R_3$ ,  $R_6$  and  $R_7$  are as defined above for formula (I), to a Mannich reaction with a secondary amine HNR<sub>2</sub>R<sub>4</sub> in which  $R_7$  and  $R_4$  are as defined above for formula (I) using paraformaldehyde in thanol or acetic acid at a temperature of from about 20 degrees to 120 degrees centigrade, and optionally converting the product into a salt thereof.

Compl. Specn. 90 pages. Drgs. 2 sheets.

CLASS: 130-B.

161177

Int. Cl. C 22 b 11/00, 15/00.

PROCESS OF RECOVERING COPPER AND OF OPTIONALLY RECOVERING SILVER AND GOLD BY A LHACHING OF OXIDEAND SULFIDE-CONTAINING MATERIALS WITH WATER SOLUBLE CYANIDES.

Applicant: MNR REPROCESSING, INC., OF 100 WEST TENTH STREET, WILMINGTON, DELAWARE, 19801. UNITED STATES OF AMERICA.

Inventors: 1. GEORGE MARTIN POTTER, 2. ARTHUR BERGMANN, 3. ULRICH HAIDLEN.

Application No. 528/Cal/84 filed July 24, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, calcutta,

### 8 claims

A process for recovering copper and optionally recovering silver and gold from sulfice-and oxide-containing ores, concentrates, residual waste products and slags in particulate form which contain said metals, comprising treating the particulate form which contain said metals, comprising treating the particulate with an aqueous solution of an alkali cyanide or alkaline earth cyanide to produce a cyanide laden solution; adding a water-soluble sulfide compound to the laden solution; adjusting the solution pH to below 5 by an addition of said to effect precipitation of metal sulfide under super atmospheric pressure characterized in that precipitation of metal sulfide, the filtration to separate metal sulfide and the recovery of free hydrocyanic acid contained in the filtrate are carried under superatmospheric pressure of 1.5 to 15 bars and preferably in the range of 1.5 to 4 bars while the temperature is maintained substantially at ambient temperature, with seasonal variation in carrying out the process

Compl. Specn. 18 pages. Drg. 1 sheet.

CLASS: 146-C.

161178

tot. Cl. G 01 n 27/00.

ELECTIC MOISTURE METER.

Applicant: KEIT ELECTRIC LABORATORY, OF 8-1, MINAMI-MAGOME-1-CHOME, OTA-KU, TOKYO, JAPAN.

Inventors: 1. HIDEYASU YUUKI, 2. KUNI TOKI.

Application No. 278/Cal/85 dated April 11, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, calcutta.

#### 4 claims

An electric moisture meter for measuring a rate of water content of grain, comprising :

- (a) a container with first and second electrodes between which a sample of grain is placed;
- (b) a spring balance on which said container is placed and of which the springs expand down and contract up in proportion to the weight of said grain sample and said container;
- electrode disposed to oppose a third electrode 51 mounted to said spring balance and thereby to form an electric capacitance between said third and fourth electrodes, and which is mounted to a fixed portion; and
- (d) means for correcting said rate of water content coresponding to an electric capacitance measured between said first and second electrodes for error due to the change of weight from a standard weight by a voltage signal corresponding to the weight of said grain sample which is measured between said third and fourth electrodes.

Compl. Speen, 10 pages, Drgs. 3 sheets.

CLASS: 32-E; 32-F<sub>3</sub> a.

161179

Int. Cl. C 07 c 69/00; C 08 g 23/20.

PROCESS FOR THE PREPARATION OF ANIONIC SURFACE-ACTIVE COMPOUNDS BASED ON OXYAL-KYLATED NEPHTHOL NOVOLACS.

Applicant: HOECHST AKTIENGESELLSCHAFT OF D-6230 FRANKFURT AM MAIN 80, FEDERAL REPUBLIC OF GERMANY.

Inventors: 1. HEINZ UHRIG, 2. KLAUS EHL.

Application No. 522/Cal/86 dated July 11, 1986.

Division of Application No. 140/Cal/82 dated February, 1982. 5th

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 5 claims

A process for the preparation of an anionic surface active oxalkylated naphthol novolac of the general formula (I) of the accompanying drawings :-

in which Ar denotes napthalene, X denotes -CH<sub>2</sub>-CH<sub>2</sub>-and/or -CH<sub>2</sub>CH(CH<sub>3</sub>)-, Y denotes identical or different radicals of the formulae -CH<sub>2</sub>-CH<sub>2</sub>-, -CH<sub>2</sub>-CH (CH<sub>3</sub>)- and -CH<sub>2</sub>-CHOH-CH<sub>2</sub>-,

Z denotes identical or different radicals of the formulae-OH and-SO<sub>8</sub>M in which M represents a cation, with the proviso that at least one radical Z is different from OH, R<sup>192</sup> and R<sup>3</sup> denote hydrogen or alkyl having 1 to 14 C atoms, R denotes hydrogen or alkyl having 1 to 9 C taoms, m denotes a number from 1 to 150 and n denotes a number from 1 to 9 which comprises reacting a compound of the formula (1), in which Ar X, Y, R, R<sup>3</sup>, R<sup>3</sup>, R and n have the meaning mentioned above and in which Z denotes -OH or -C1, with the proviso that at least one radical Z is different from OH, with an alkali metal sulfite at a temperature between 100 to 200°C, and neutralizing obtained acid with a base MOH in which M has the above-mentioned meaning.

Compl. Spen. 26 pages. Drg. 1 sheet.

## CLAIM UNDER SECTION 20(1) OF THE PATENTS ACT, 1970

The claim made by Cool Air Corporation Pte. Ltd. under Section 20(1) of the Patents Act, 1970 to proceed the application for Patent No. 151876 in their name has been allow-

### PATENTS SEALED

151876 153405 153476 158086 158087 158088 158089 158093 158094 158095 158098 158099 158103 158104 158106 158109 158110 158111 158127 158128 158129 158152 158155 158162 158164 158166 158181 158184 158186 158188 158192 158193 158195 158204 158205 158212 158217 158267 158268.

### AMENDMENT PROCEEDING UNDER SECTION 57

The amendments proposed by the Color Group Limited, in respect of patent application No. 152617 (756/Del/79) as advertised in Part-III, Section 2 of Guzette of India dated the 11th February, 1984 have been allowed.

Notice is hereby given that Council of Scientific and Industrial Research, Raft Marg, New Delhi-110001 have made an application under Section 57 of the Patents Act, 1970 for amendment of specification of their application for Patent No. 157254 for "An improved process for the desulphurisation of Ferrous melts in the Iron and Steel Industry". The amendments are by way of correction to bring out the scope of the invention claimed clearly. The application for amendments and the proposed amendments can be inspected free of charge at the Patent Office Branch, Unit No. 401 to 405, III Floor, Municipal Market Building, Saraswati Marg, Karol Bagh, New Delhi-110005, or copies of the same can be had on payment of usual copying charges. Any person interested in opposing the application for amendment may file a notice of opposition on the prescribed Form 30 within 3 months from the date of this notification at Patent Office Branch, New Delhi. If the written statement of opposition is not filed with the notice of opposition, it should be filed within one month from the date of filing said notice of opposition.

## COMMERCIAL WORKING OF PATENTED INVENTIONS 11 FCT. ENGG. LIST NO. 11

The following Patents in the field of Electrical Engineering Industry are not being commercially worked in India as admitted by the Patentees in the statements filed by them under Section 146 (2) of Patents Act. 1970 in respect of calender Year 1987 generally on account of requests for licences to work the Patented inventions. Persons who are interested to work the said Patents commercially may contact the Patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name and Address of Patentees	Title of the invention
1	2	3	4
150117 150132	9-6-1978 26-6-1979	Klein, Schanzlin & Becker AG, Frankenthal (Pfalz), Werk Frankenthal, Postfacch 225, Johnn-Klein-Strasse, 9, D-6710, Frankenthal (pfalz), Federal Republic of Germany. Siemens Aktiengesellschaft, Berlin and Munich, West Germany	Electric terminal leads.  High-voltage switchgear.
150381	18-4-1979	Do.	Electrical Switch gear.
150451	2-11-1979	Peico Electronics & Electricals Limited. Shivsagar Estate, Block 'A'Dr. Annie Besant Road, Worli, Bombay 400 018.	A process for obtaining moisture proof mica and a non-hermetically sealed capacitor containing the same, as dielectric.
150484	20-12-1978	Council of Scientific & Industrial Research, Rafi Marg, New Delhi.	Improved photoconductive plates for use in Electrophotographic machine and a process of preparation of the same.
150524	10-1-1979	Aimants Ugimag S.A., Avenue d, Uriage, 38838, Saint Piuco-d, Allevard, France.	Process of preparing ferrite powder on permanent magnets manufactured therefrom.
150707	20-3-1979	Westinghouse Electric Corporation, Westing-house Bldg. Gateway Centre, Pittsburgh, Pennsylvania-15222, U.S.A.	Method of manufacturing semi-conductor devices and semi-conductor devices produced thereby.
150914	27-6-1979	Siemens Aktiengesellschaft, Berlin and $M_{utrich}$ West Germany.	Electro-a coustic Trandocer.
131174	25-1-1972	Council of Scientific & Industrial Research. Rafi Marg, New Delhi.	Improvements in and relating to glass to metal seals for encapsulation of semiconductor devices.
136301	18-5-1972	Council of Scientific & Indostrial Research, Rafi Marg, New Delhi.	Improvements in as relating to a process for making photocondoctive plates for electrophotographic material.
138127	29-8-1973	Do.	Improvements in or relating to the forma- tion of plates for nickel cadmium batteries.
139702	6-9-1973	Do.	Improvements in or relating to etching of aluminium or its alloys for use as electrodes in aluminium, electrolytic capacitors.
136940	20-6-1972	Do.	An ultrasonic interferometer.
137749	27-12-1972	Do.	An apparatus for making three dimensional panaronic photographic displays to be seen without any viewing aid.
137966	28-12-1973	Do.	Improvements in or relating to the costing of magnetic recording tapes.
150942	5-6-1979	Chlorine Engineers Corporation Ltd., No. 2-5, Kasumigaseki, 3-chome, Chiyoda-ku, Tokyo, Japan.	Electrolyzing cell for mercury method having detecting means for short circuiting between electroder.
151318	15-11-1979	Duracell International Inc., at 3029, East Washington Street, Indianpolis, Indiana. U.S.A.	Alkaline electrochemical cell.
151319	15-11-1979	Do.	Electrochemical cells containing fluid depolarizers.

1	2	3	4
151324	25-4-1980	Peico Electronics & Electricals Limited. Shivasagar Estate, Block 'A', Dr. Annie Besant Road, Worli, Bombay 400 018.	A circuit for automatically switching off power supply to a radio or television, when the turned signal gear off the air or is interrupted and a radio or television having the same.
151360	6-10-1978	Plessey Overseas Ltd., of Vicarage Lane, II Ford, Essex IGI, 4AG., England.	Improvements in or relating to non-destructive testing of feulomagnetic object.
151378	19-10-1978	Siemens Aktiengesellschaft, Berlin & Monich, West Germany.	A high voltage switching installation.
151394	7-6-1979	Do.	Electrical Contact Assembly.
151389	18-4-1978	International Business Machines Corporation. of Armonk, New York, 10507, U.S.A.	A method for preparing a chromium or a chromium alloy electroplating solution.
151459	27-6-1978	Hitachi Ltd., 4, 1-Chome, Maronouchi, Chiyoda-ku, Tokyo, Japan,	Electronic device and method of fabricating the same.
151460	27-6-1978	Do.	An Electric device.
151461	27-6-1978	Do.	An Electronic device.
151466	24-3-1979	Bharat Heavy Electricals Limited, 18/20, Kastnrba Gandhi, Marg, Ansal Bhawan, New Delhi-110 001, India.	A device for cleaning or polishing metallic surfaces.
151737	3-8-1979	UNITED Technologies, Corporation. 1, Financial Plaza, Hartford, Connecticut, 06101, U.S.A.	A control system for a wind turbine having a wind driven motor.
151757	24-1-1980	DURACELL INTERNATIONAL INC., at 3029 East Washington, Street, Indianapolis, U.S.A.	Battery package with DC to DC converter.
151770	23-9-1980	SIEMENS AKTIENGESELLSCHAFT, Berlin & Munich, West Germany.	Device for damping oscillation in regulated electric machine.
151850	18-10-1979	Gould Inc., 1200 First National Bank Bldg., St. Paul, Mainnesata.	A battery having a side terminal assembly.
151947	23-5-1980	Siemens Aktiengesellschaft, Berlin & Munich. West Germany.	High-voltage electrical switch.
151956	11-5-1979	Hitachi, Ltd., 5-1, 1-Chome, Marunouchi, Chiyodako, Tokyo, Japan.	Process for prodocing electric machine windings.
152055	7-5-1979	ICI Ltd., Imperial Chemical House, Millbank London, SW 1p. 3 JF, England.	Electrically actuable igniter assembly and method of constructing such an assembly.
152220	21-4-1979	Siemens Aktiengesellschaft, Berlin & Munich. West Germany.	Apparatus for establishing multi-address and conference cell connections.
152284	12-5-1980	International Standard Electric Corporation, of 320 Park Avenue, New York 22, U.S.A.	An automatic signal equalization circuit.
152428	20-12-1979	Westinghouse Electric Corporation, Westinghouse Bldg., Gateway Center, Pittsburgh, Pennsylvania-15222, U.S.A.	A method of forming an irradiated region of a desired thickness, dosage and dosage gradient in materials such as semiconductor bodies by nuclear radiation.
152431	18-11-1980	Siemens Aktiengesellschaft, Berlin & Munich. West Germany.	Electromagnetic Switching device.
152734	14-5-1980	General Electric Company, 1, River Road, Schenectady S, New York, U-S.A.	Improved impregnation capacitor.
152797	11-8-1980	Lucas Industries Ltd., of Great King Street, Birmingham, B19, England.	A secondary zinc electrode and a cell employing such electrode.
148076	19-11-1979	Mandayam Ammanji Srishaila, of No. 1, 9th Cross Road, Swimmingpool Extension, Banglore 560003, India.	A device for concoaled electrical wiring.
149716	2-8-1979	Brakes India Limited, at Padi, Madras 600 050, Tamil Nadu.	An electric switch for direct current circcuts.
150176	18-11-1980	Anil Ananthakrishna, C/o. A.K. Anantha- krishna, 14 Alexander Street, Richmond Town, Bangalore.	A power propelling attachment for a vehicle

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151336	24-3-1981	Automotive Ancillary Services, at 53 Third Main Road, Gandhi Nagar, Adyar, Madras-600 020. Tamil Nadu.	A electric switch.
131289	7-5-1971	Texaco Development Corporation, 135, East, 42601 Street. New York. 100 017, U.S.A.	An electrical indicator for pneumatic controls system.
131600	4-6-1971	Bunker Ramo Corporation of 900 Commerce Drive, Oak, Brook, Illinois, U.S.A.	Improvements in electric contacts,
132605	21-8-1971	Combustion Engineering Inc., 100 Prospect Hill Road, Windsor, State of Connecticut, U.S.A.	Apparatus for initiating the heat generation phase of an electroslag refining process.
135015	21-3-1972	Canon Kabushiki Kaisha, of 30-2, 3-Chome, Shimomaruko, Ohta-ku Tokyo, Japan.	Method of transferring images developed by a liquid developer in electrophotographic processes.
135699	18-5-1972	Canon Kabushiki Kuisha, of 30-2, 3-chome, Shimomaruko Ohta-ku, Tokyo, Japan.	Electro photographic copying machines.
136036	17-7-1972	agon seheaback, 5, Eichanstrasse, Zeetlarn, Regensburg, West Germany.	Improvements in or relating to regulating transformer
136199	16-9-1972	ICI LTD, Imperial Chemical House, Millbank, London, S.W. 1, England.	Electroder for electrochemical process and a method for the manufacture thereof.
136348	19-5-1973	Nippon Hoso Kyokai, No. 2-3, 2-Chome, Hshiaiwaicho, Chiyodaku, Tokyo, Japan.	Microwave Circuits.
136463	17-2-1973	N.V. PHILIPS' GLORILAMPENFABRIE- KEN, of the Netherlands, Carrying on usiness at Emmaslangel, Eindhoven, The Netherlands.	Transistor amplifier for broad-band information signals.
139051	15-3-1973	N.V. PHILIPS' GLDEILAMPENFABRIE- KEN, at Emmasingel, Eindhoven. The Netherlands.	Semicondoctor device and method of mano- factoring the device.
137351	9-1-1973	ASEA AB., Vasteras, Seden.	Insulating part of electric switching device.
137581	21-14-1973	Hitachi Ltd., 4, 1-Chome, Marononchi, Chiyod5-ko, Tokyo, Japan.	Rotary electric machine of the liquid cooled type.
137812	10-9-1973	Hitachi Ltd., 5-1, 1-Chome, Marunouchi, Chiyoda-ko, Tokyo, Japan.	Current liniting circuit breaker.
137800	12-9-1973	SIEMENS - AKTIENGESELLSCHAFT, Barlin & Munich; Germany (West).	A support for a movable contract of an electrical switch.
151783	9-10-1980	Kabelmete Electro GmbH, of Kabelkamp 20, 3000 Hannover I, West Germany.	Mositure proof plastic insolated electric cable particularly for the transmission of higher voltages.
135701	18-5-1972	CANON KABUSHIKI KAISHA of 30-2, 3-chome, Shimomaruko, Ohta-ko, Tokyo, Japan.	Electrophotographic copying machine.

ELECT. ENGG. LIST NO. III

### COMMERCIAL WORKING OF PATENTED INVENTIONS

The following Patents in the field of Electrical Engineering Industry are not being commercially worked in India as admitted by the Patentees in the statements filed by them under Section 146(2) of Patents Act, 1970 in respect of Calendar Year 1982 generally on account of want of requests for licences to work the Patented inventions. Persons who are interested to work the said Patents commercially may contact the Patentees for the grant of a licence for the porpose.

Patent No.	Date of Patent	Name & Address of Patentees	Title of the inventions.
153946	30-10-1980	The Jacobs Manufacturing Company, of 22 East Dodleytown Road, Bloomfield, Connecticut 06002, U.S.A.	Improved solenoid.
140131	28-6-1973	Westinghouse Electric Corporation, Pittsburgh, Pennsylvania, USA.	Dielectric fluids for electrical apparatus.
154230	14-7-1982	Do.	Power capacitors.
154271	11-6-1981 <sup>-</sup>	Do.	A method of making thyristors.
146274	7-4-1977	Do.	Capacitor.
146748	22-12-1976	Do.	Low voltage vacuum shorting switch and method of manufacturing the same.
149442	4-2-1978	Do.	Low voltage vacuum shorting switch for electrolytic cells.
151456	20-2-1980	Do.	Apparatus for recovering slip frequency power from a wound rotor industion motor.
153170	7-3-1981	Do,	Method of producing transistors having altered electrical parameters from original transistors.
153171	<b>25-3-198</b> l	Do.	Vacuum electric circuit interrupters.
153110	28-1-1981	Do.	Multiplexed data acquisition systems.
152092	17-8-1979	Do.	Capacitor having dielectric fluid with hig di-isopropyl biphenyl content.
152802	19-8-1981	Do.	Control system for controlling the spee of pole-amplitude-modulated (PAM) motor.
152784	1-11-1980	Do.	Semiconductor devices.
152771	15-10-1981	Do.	Power capacitor sturcture and method of manufacuting the same.
152708	29-8-1980	Societe Des Electrodes Et Referactories Savole (SERS), 12 Rue Du General F7 72008, Paris, France.	A new nippled joint for a furnace electrode.
152658	28-11-1980	Westinghouse Electric Corporation, Pittsbugh. Pennsylvania, USA.	A process for preparing PNPN thyristors
152409	14-8-1980	Do.	Switch operator for use with a switch.
152428	12-12-1979	Do.	A method of forming an irradiated region of a desired thickness, dosage and dosage gradient in materials such as semiconductor bodies by nuclear radiation.
152340	20-12-1979	Do.	Magnetic core structure for electrical inductive apparatus.
152206	10-1-1980	Do.	Iron-engaging slot wedges for dynamo electric machines and dynamoelectric machines comprising the same.
152079	30-12-1980	Westinghouse Electric Corporation-Westing- house Bldg, Gateway Centre, Pittsbugh, Pen- nsylvania 15222, U.S.A.	Method for making a thyristor.

1	2	3	4
151021	8-11-1978	Westinghouse Electric Corporation, Pittsburgh, Pennsylvania, USA.	Capacitor structures for use in power capa- citors having high stress capability.
150707	20-3-1979	Do.	Method of manufacturing semiconductor devices and semiconductor devices produced thereby.
150490	10-5-1978	Westinghouse Electric Corporation, Westinghouse Bldg, Gateway Centre, Pittsburgh, Pennsylvania-15222, USA.	Electrical apparatus such as capacitors containing dielectric fluid.
150616	2-1-1979	RCA Corporation, 30 Rockefeller Plaza, New York, N.P. 10020, USA.	An integrated circuit structure particularly for coms/sos integrated circuits.
141988	26-10-1974	Do.	Semiconductor devices and method of making.
142824	18-7-1974	Do.	Semiconductor device with heat sink.
144541	19-4-1976	Do.	Integrated circuit device including both N-channel & P-channel insulated gate filed effect transistor.
147572	2-1-1978	Do.	Semi-conductor device and method of making thereof.
147578	2-1-1978	Do.	Multi-layered passivating structure for semi- conductor devices and method of fabricating the same.
147965	7-11-1977	Do.	A semi conductor device.
	28-2-1978	Do.	Semi-conductor devices.
154232	12-11-1981	Chloride Group Limited, of 52 Grosvenor Gardens, London, SWIW OAU, England.	Vent for electric storage battery.
154318	9.9.1980	Oronzio De Nora Impianti Elettrochemicial S. p. A., at Via Histolfi 35, 20134 Milan, Italy	A method of preparing a novel electrolysis cell for generating halogens and a novel electrolysis cell made thereby.
153846	11-9-1980	XEROX CORPORATION, of Xerox Square, Rochester, New York, U.S.A.	Means for supplying electrical power.
154 <b>3</b> 55	23-2-1981	XEROX CORPORATION, of Xerox Squre, Rochester, New York, U.S.A.	Fuser system for an electrostatic represduc- tion apparatos
154444	27-8-1981	Bogey B. V., of Nassschrisel 13, Vonlo, The	Light emitting semi-conductor device.
		Nethorlands.	
141071	6-1-1975	DR. BECK & CO., AG., of 2000 Hamburgh 23, Gross mannstrasse 105, F. R. G.	A method of insulating electrical conductors.
144364	5-3-1976	PROUCITS C H M QUES UGINE KUHI- MANN, of 25, Boulevard de L'Amiral Broix 75782 Paris Cadex 13, France.	Electrolytic colls without diaphragm.
144679	28-12-1973	FABWERKS HOECHST AKTIENGESELL SCHAFT, vormals Meister Lucusi; Borning, of 45, Brungingstrasse, Frankfurt/Main, F.R.G.	Longterm electrode for electrolytic processes and process for their prepn.
146118	12-9-1977	M/s. PEICO ELECTRONICS & ELECTRACALS LIMITED, Shivsagar Estate, 'A' Block. D. Annie Besant Road, Worli, Bombay, 400 018, Maharashtra, India.	Push-Push swikh.
146294	9-11-1976	The Bendix Corporation, Executive at Offices, Bendix Centre, Southfield, Michigan 78073, U.S.A.	Electrical contact assembly.
149821	18-4-1978	Vickers House, Millbank tower, Millbank, London, SW1P, URA, England.	Improvements in or telating to the electro- lytic graining of aluminium or alui minium alloy.
149716	2-8-1979	Brakes, India Limited, at Padi, Madras-600050	An electric switch for direct current circuits.
149279	15-5-1978	Nikolai Stepanovich Lidorenko & Etc, 3 Mylischinskaya, Ulitsa, 14 a Ku 127, Mascow, USSR.	Semiconductor photovoltaic generator and method of manufacturing thereof.

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151335	24-6-1981	Automotive Ancillary Services, at 53 Third Main Street, Gandhi Nagar, Adyar, Madras- 600 020, Tamil Nadu, India.	An electric switch.
151336	29-7-1981	Automotice Ancillary Services, at 53 Third Main Road, Gandhi Nagar, Adyar, Madras- 600 020. Tamil Nadu, India.	An electric switch.
153847	26-12-1980	PERMELEC ELECTRODE LTD., No. 27, Kasumigaseki, 3-Chome, Chiyodaku, Tokyo, Japan.	Electrolytic apparatus sing a diphragm of a solid polymer electrolyte and method for production thereof.
153736	27-1-1981	SULZER Brothers Limited, of CH-8401, Winterthur, Switzerland.	Method of producing magnessum from magnesite or dolomite.
153576	8-12-1980	HERAEUS ELEKTRODEN GmbH., Heraeustr. 12-14, 6450. Hana (Main). Germany.	Eestrode for electrolysis cells.
153538	28-2-1981	MITSUBISHI DENKI KABUSHIKI KAISH A of No. 2-3, Natunuodhi, 2 coome, Chiyodeku, Tokyo, Japan.	Apuffer tyre gas circuit breaker.
153548	1-1-1980	ICLUTID., Imperial Chemical House, Millbank. London SWIP, 31F, England.	Fusehead igniter assembly.
153553	7-1-1980	IMI MARSTON LTD., Wobaston Road. Fordhouses, Wolverhampton, WV10 6QJ, England.	Impressed current cathodic protection anode assembly.
153495	29-10-1980	RAyovag CORPORATION, of 101 Washing) ton, 80 Avenue, Madison, Wisconsin,	A metal infiltrated porous sintered matrix insoluble anode.
153478	17-7-1981	AMERICAL CYANAMID COMPANY, of Wayne, New Jersey, U.S.A.	Electrochromic display device.
153140	13-1-1980	ASAHI GLASS COMPANY LTD., of No. 1-2, Matonoochi, 2-chome, Chiyoda-ko, Tokyo Japan.	An improved process for electrolyzing and an ion exchange membrane cell for carrying it out.
152888	8-4-1980	DEXTEC METALLURGICAL PTY, LTD., of 169 Miller Street. North Sydney, New Sooth Wales, 2060, Australia.	Production of lead from ores and concent) rates.
152797	11-8-1980	LUCAS INDUSTRIES LTD., of Great King Street, Birmingham B19 2XF. England.	A secondary zinc electrode and a cell employing such electrode.
152756	5.3.1980	HOECHST AKTIENGESELLSCHAFT, of 4230, Frankfurt Main 80, Federal Republic of Germany.	Electrolysis apparatus.
152688	22-5-1981	BARR & STROOUD LIMITED. of Caxton, Street. Anniesland. Glasgow. G13, 1HZ, Scotland.	A Wave form generator.
152705	16-6-1980	CONTRAVES ITALLANA S.p.A., of Via Affile, 102-10131 Rome, Italy.	An integrated radar antenna array.
152660	29-1-1981	Novex foregint rade co. Ltd., of 1343 Bodapes P. O. Box 62, Hongary.	t Induction motor with short circuited armiture and a pipe cage.
15 <b>2</b> 570	21-11-1980	Cangai Denki Kogyo Kaboshiki Kaisha, 13/3, Nihonbashi Kayabacho Chome, Chuo-Ku, Tokyo, Japan.	Composite electrical contact.
152449	15-5-1978	Enertee (formerly known as LASCO), of 12, Place des Etats-Unis, 92120, Montrouge, France.	Electronic devices for producing an outfusignal related to electrical power.
152427	11-12-1979	N. V. PHILLIPS GLOEILAMPENFABRIE- KEN, of the Netherlands, carrying on ousines as Manufacturers at Emmasingel. Eindhoven, Netherlands.	s and/or vapour discharge tube.
151988	16-5-1979	AMERICAN STANDARD INC. of 10 Wes 40th Street, New York, New York, 10018, U.S.A.	
152055	7-5-1979	ICI LTD., Imperial Chemical House, Mill bank, London SWIP, 3JF, England.	Electrically actuable ignitor assemb and method of constructing such an assemb
151437	31-5-1979	ROSE MOUNT INC. of Minnesola, U.S.A. of 12001, West 78th Street, Eden Prairie, State of Minnestoa, U.S.A.	

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1	2	3	4
150772	14-8-1979	THE ELECTRIC FURNACE COMPANY, of 432 West Wilson, Street, Salem Chio, US.A.	An electric heating system.
150336	18-12-1978	MOTEURS LEORY-SOMER of Boulevard Marcellin Leroy, 16004, Angouleme, France.	A system for regulating the terminal voltage of an independent, variable speed alternating-current generator.
150071	2-5-1978	The Echlin Manufacturing Company, of U.S. 1, Branford, Connecticut, U.S.A.	A unitory magnetic wire device and a method of manufacturing the same.
150119	13-6-1978	SOCIETE DE PARRIS ET DU RHONE, 36 Avenoe Jean Mermoz, 60008, Lyon, Franc	Flectric starter for an internal combustion ce engine.

CHEM, ENGG, LIST III.

### COMMERCIAL WORKING OF PATENTED INVENTIONS

The following Patents in the field of Chemical Engineering Industry are not being commercially worked in India as admitted by the Patentees in the statements filed by them under section 146(2) of Patents Act, 1970 in respect of Calender Year 1984 generally on account of want of requests for licences to work the Patented inventions. Persons who are interested to work the said Patents commercially may contact the Patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name & Address of Patentocs	Title of the inventions
1	2	3	4
150012	12-6-1978	Hocchet Aktiengesellschaft, of 6230, Frankfurt, Main 80, F.R.G.	A process for the preparation of Azo pigment.
150013	14-6-1978	GENERAL ELECTRIC COMPANY, of 1 River Road, Schenectedy, State of New York- 12305, U.S.A.	Process for making a sintered polycystallune cubic boton nitride compact.
150020	3-7-1980	Hindustan Ciba-Geigy Limited, of Aarey Road, Goregaon, East, Bombay-400 001, Maharashtra, India.	A process for the preparation of pharma- cologically active new guanidine derivative.
150071	1-8-1979	The Fertilizer (Planning & Development) India Ltd., CIFF Buildings, P.O. Sindu 828122, DIST: DHANBAD, Bihar.	A method for preparing an absorbent for hydrogen sulphide, cyanogen, cyanides nitric nitric oxide contained as impurities industrial gases.
150073	12-11-1980	Hindustan Ciba-Goigy Limited, of Aaray Road, Goregaon East, Bombay-400 063, Maharashtra, India.	A process for the manufacture of 4-trothic eyanato-4'-nitro diphenylamine.
150125	8-12-1978	Hocchst Aktiongesellschaft, of D-6230, Frankfurt Main 80 Federal Republic of Germany.	Process for the manufacture of a copper cobalt or chromium complex compound of a monozao compound.
150159	11-5-1978	Pallips Petroleum Company, Bartlesville State of Okdahoma, U.S.A.	Process for recovery of pure tube oil stock
150187	17-5-1978	Engelhard Corporation, of No. 100 West, Tenth Street, of Wilmington, of New Castle, U.S.A.	Process and catalyst for isomerization of alkyl aromatics.
150196	28-11-1978	Imperial Chemical Industries Ltd., of Imperial Chemical House, Thames House, North, Millbank, London, SW1, 3JF, England.	Process for the manufacture of phtnalazine 4-ylaectic acid derivatives.
150213	21-11-1978	Nuto Boseki Co. Ltd., of 1, Aza Higashi Govomo, Fukushima-shi, Japan.	Glass composition having fiberforming properties and alkali resistant glass fibres made therefrom.
150224	5-10-1978	Norton Company, 1, New Bond Street Worcester, State of Massachusetts, U.S.A.	A dumped packing element for use in gas liquid contact apparatus.
150233	9-5-1979	CPC International, Inc., of International Plaza, Englewood Cliffs, New Jersey 07632, U.S.A.	A continuous wet wat refining process.

1	2	3	4
150238	4-2-1980	Hoechst Akteungesellshaft, of D-6230, Frankfurt, AM Main 80, Federal Republic of Germany.	Process for the preparation of 5-Nitro- benimidazolone-(2).
150250	3-7-1980	Hindustan Ciba-Geigy Limited, of Aarey Road, Goregaon East, Bombay-400 063, Maharashtra, India.	A process for the preparation of new Guani- dine derivatives.
150281	29-11-1978	UOP INC. of Ten UOP Plaza, Algonquin & Mt. Prospect Roads, Des Plaines, Illinois 60016, U.S.A.	Process for dehydrogenating a hydrocarbon charge stock for preferred recovery of linear mono-olefines.
150312	14-8-1978	Hoechst Aktiengesellschaft, of D-6230, Frankfurt Main 80, F.R.G.	Process for the manufacture of fatty acid nitriles and glycerol from glycerides, especially from natural fats and oils.
150315	13-10-1978	GENERAL ELECTIRC COMPANY, of I River Road, Schenectady 5, New York, U.S.A.	Process for preparing an intergral composite of a polycrystalline diamond body, and silicon carbide or silicon nitride substrate.
15365	26-10-1978	Hoechst Aktiengaselischaft, of D-6230, Frankfurt/Main 80, Federal Republic of Germany.	Process for the manufacture of water soluble dyestuffs.
150366	26-10-1978	Do.	Process for the preparation of Water soluble Azo-dyastuffs.
150367	26-10-1978	$\mathcal{D}_0$ .	Process for the preparation of Water soluble dyestuffs.
150368	26-10-1978	Do.	Process for the preparation of Water soluble dyestuffs.
150387	30-8-1979	Motalisesclischaft AG. of 16, Frankfurt AM. Reuterweg, West Germany.	Process for briquetting sponge Ircn-containning material.
150486	18-3-1980	Council of Scientific & Industrial Research, Rafi Marg, New Delhi.	The Continuous process for the surface graining of aluminium toil for aluminium offset lithographic plates used in duplicating machine.
150487	29-12-1978	Do.	Process for the preparation of high purity graphite.
150497	8-11-1978	Monsanto Company, at 800 North Lindbergh Beulovard, St. Louis, Missouri 63166, U.S.A.	A process for preparing thermoplastic compositions.
150542	6-10-1978	Hoechst Aktiengesellschaft, of D-6230, Frank furt/Main 80-F.R.G.	Process for the preparation of Water soluble phthalo-cyanine compounds.
1 <b>5</b> 0551	20-12-1978	Japan Styrene Paper Corporation Limited, 1-1 Uchisaiwai-cho 2 chome, Chiyoda-ku, Tokyo, Japan.	An improvement in the process for the producing palyolefin foams.
150575	12-4-1979	Stamicarbon B.V. of Geleen, The Netherlands.	Process for the recovery of cyclohexa-none oxime.
150596	26-3-1979	Johnson & Johnson of 501 George Street, New Brunswick, New Gersey, U.S.A.	Low irritating liquid detergent compositions.
150601	22-1-1979	ASEA AB. Vasteras, Sweden.	Method of splicing a cable with an insulation of cross-linked polyethyleneond another cross linked polymer.
150646	18-9-1978	Robert Blaine clay, of 728 West 3800 South Street, Bountiful, Utah 84010, U.S.A.	Blasting composition.
150726	21-2-1979	STAMICARBON B.V., of Netherlands, of Geleen, The Netherlands.	Process for the preparation of cyclohexanol & cyclohexanone.
150813	8-11-1979	The Fetifizer (Planning & Development) India Ltd.,	Improvements in & relating to process for the manufacture of concentrated phosphoric acid from rock phosphate.
150922	4-5-1979	D <sub>0</sub> .	A process for producing rock phosphate suitable for phosphoric acid manufacture from Low grade rock phosphates.

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150949	28-5-1979	Hoechst Aktiengesslischaft, cf D-6236, Frankfurt/Main 80, F.R.G.	Process for the preparation of water soluble phthalosyanine dyostuffs.
150990	19-5-1980	Metallgoseelischaft AO, of 16, Frankfurt AM Reuterweg, West Germany.	Process of directly reducing iron oxide-containing materials in a retary kilr.
151011	26-9-1978	Klochner-Humboldt-Deutz Aktiengesellschaft, of Deutz-Mulheimer-strasse 111, 5000 Koln 80, West Germany.	Method and apparatus for continuous re- covery of heavy metal phases particularly of metallic tin, low in iron.
151013	10-6-1980	Hindustan Lever Limited, 165-166 Backbay Reclamation, Bombay-20, Maharashtra, India.	A process for the purification of sulfete.
151040	14-2-1979	Chief Controller, Research & Development, Ministry of Defence, Gevt. of India, An Indian National.	A process for producing celluloid coated rayon/cambric sheet.
151048	22-3-1979	Heechst Aktiengesellschaft, of D-6230, Frankfurt/Main 80, F.R.G.	Improvements in a process for the continuous dycing flat textile structure made of collulosic fibres and of their mixtures with synthetic fibres.
151063	11-12-1980	Standard Brands Incorporated, 625, Madison Avonuc, New York, State of New York, U.S.A.	Process for irometizing flucoss to fructore enzymatically.
151076	15-5-1979	Rarukichi Nagata, Terukichi Nagata, No. 32-28, 1-Chome, obitakyu, Chetu City, Tokye, Japan.	Method and apparatus for producing calcium composit.
151154	16-4-1979	Stamicarbon B.V., of Galeen, The Netherlands.	Process for the preparation of cyclohexanons and apparatus for carrying out the process
151156	28-9-1979	Hindustan Lever Limited, 165-166 Backbay Reclamation, Bombay-20, Maharashtra, India.	Process for preparing a particulate alkaline detergent composition.
151193	19-3-1979	Societe Des. 12 rue du general Pay, 75008, Paris, France.	A precess for preparing port.
151279	28-5-1979	Texaco Development Corporation, 2000 Westchester Avenue, White plains, New York 10650, U.S.A.	Production of clean HCN-free synthesis gas.
151359	10-8-1978	Johnson & Johnson ,501 George Street, New Brunwick, New Jersey, U.S.A.	Processure-sensitive adnesive compostions.
151416	16-10-1979	Hindustan Lever Limited, 165-166, Backbay Reclamation, Bombay-400 020, Maharashtra, India.	Process for preparing soap power formulations.
151492	4-2-1981	The Ahmedabad Manufacturing and Calico Printing Co. Ltd., Outside Jama[pur Gate, Ahmedabad, Gujatat, India.	Process for the preparation of a polyester coating resin from high molecular weight linear polyester waste.
151493	4-2-1981	De.	A precess for the preparation of a polyester coating resin from high molecular weight linear polyester waste.
151496	<b>26-2-</b> 1981	Chamanlal Jagannath Shishoo, Muljibhai Bhimjibhai and Vishweshawar Shivaram Bhadti, of Lallubhai College of Pharmacy, Ahmedabad-380 009, Gujarat, India.	Process for the manufacture of pharmacolo- gically active new thiropyrimidines and salts thereof.
151516	4-3-1980	Stamicarbon B.V of P.O. Box 10, Geicen, the Netherlands.	Method for the purification of benzoldehyde
151532	16-6-1979	Outokumpuoy, of Outokumpu, Finland.	Process for the selective Froth-flotation of sulfidic, oxidic and salt type minerals.
151776	13-6-1979	Stanmicarbon B.V. of P.O. Box 10, Geleen, The Netherlands.	Process for the treatment of urea solution and apparatus therefor.
151790	6-2-1980	Outokumpu oy, of a Joint Stock Company, of Outokumpu, Finland.	A process for scrubbing cyanide bearing furnace gases which are produced in the me

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151797	29-10-1979	Shell Internationale Research Maatshcappij B.V., of Carel Ven	Process and equipment for the oxidation of soot obtained in the preparation of a gas mixture containing hydrogen and carbon monoxide.
151805	6-5-1980	Asahi Kasei Kogyo Mabushiki Kaisha, 2-6, Dojima-bama, I-Chome, Kita-ku, Osaka, Japan.	Method for producing carboxylic esters.
151853	6-11-1979	Metallgesellschaft AG. Reuterweg 14, 6 Frankfurt AM, F.R.G.	Process of producing hydrogen fluoride.
151862	14-7-1981	Hindustan Lever Limited, 165-166, Backbay Reclamation, Bombay-20, Maharashtra, India.	A method for the preparation of precipitated silicas in powder form suitable for use in dental preparations such as transparent translucent toothpastes.
151930	30-4-1979	American Petro Mart, Inc. of 220 East Main Street, Bartow, State of Florida, U.S.A.	A method of producing phospheric acid product reduced metal ion by removing magnesium and calcium ions.
151992	6-10-1979	Bast Aktiengesellschaft, cf 6700, Ludwigshafen, F.R.G.	Preparation of a tanning agent.
152158	2-11-1979	Pacific Metals Co. Ltd., of 6-1, 1-Chome, Otemachi, Chiyoda-ku, Tokyo, Japan.	Direct method for production of high-grade high purity ferromnganese.
152252	30-5-1979	Magnesium Elektron Limited, of Lumin's Lane, Cliften Junction Swinton, Manchester, England.	A method of making magnesium alloys.
152338	6-12-1980	fndian Oxygen Ltd., P-34 Tarstela Road, Calcutta-700 088.	Process for the production of alphacellulese powder.
152450	17-11-1979	UNION CARBIDE CORPORATION, at 270 Park Avenue, New York, U.S.A.	A catalytic process for producting ethylene copolymer.
152477	26-6-1979	I.S.C. Smelting Limited, of 6 St. James' Square, London SWIY 41.D, England.	Process for preducing a zinc/lead oxide product suitable for briquetting.
152496	3-11-1980	Hoechst Aktiengesellschaft, 6230, Frankfur(/ AM, Main 80, F.R.G.	A process for the manufacture of copper complex for mazan compounds.
152493	23-4-1980	Giza S.p.A. Via provincial sud, 42011, Bangnalo IN Piano, Geggio, Emilia.	A method for converting zootechnic liquid material into cumbustible gases and fertilizing mud.
152892	13-5-1980	UNION CARBIDE CORPORATION, at 270 Park Avenue, New York, State of New York 10017, U.S.A.	Improved process for the purification of an industrial gas stream.
153845	14-5-1981	LAPORTE INDUSTRIES LIMITED, of Hanover House, 14, Hanover Square, London WIR OBE, England.	Process for the didect preparation of an alkali metal or alkaline earth metal paroxide in finely divided form.
131469	24-5-1971	SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V. of, Carel Van Bylandtlaan 30, The Hague, The Netherlands.	Process for the isomerization of alkylaromatic hydrocarbons.
132782	4-9-1971	Do,	Process for preparing an improved catalyst for producing oxirane compounds by epoxi-dizing olefines with hydroperoxides.
133022	23-9-1971	Do.	A process for the decomposition of unconverted organic peroxy compounds present in the reaction production or efficient obtained by the epoxidation of olefinic compounds.
133297	21-10-1971	Do.	A process for producing matallic silver de- position on the surfaces of process refractory catalyst supports.

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133884	8-12-1971	SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., of carel Van Bylandtlaan 30, The Hague, The Netherlands.	Mixing apparatus for gases.
134023	21-12-1971	Do.	A process for recovering ethylene oxiaids.
134840	6-3-1972	Do.	Process for the removal of soot from ageous suspensions thereof.
134871	8-3-1972	Do.	Butadiene recovery process.
135360	4-12-1970	Do.	An improved process for the preparation of one or more oxirane compounds.
135692	5-5-1972	$D_0$ .	Process for the manufacture of gas mixtures containing carbon monoxide and hydrogen by the partial combustion of fuel in a reactor operated at a relatively low pressure.
136168	5-1-1973	De.	Process for producing silver catalyst.
136340	5-1 <b>-1973</b>	Do.	Process for the preparation of ethylene oxide.
136614	26-8-1972	Do.	A process for the concentration and purifi- cation of aqueous solutions of ethylene oxide.
136819	21-10-1971	Do.	Process for effecting direct oxidation of ethylene with malecular oxygen to ethylene oxide.
136843	26-4-1972	. Do.	Process for the recovery of ethylene oxide.
136927	4-9-1971	<b>Do.</b>	An improved process for preparing exirne compounds by aspoxidizing defins with hydroperoxides.
130489	5-3-1971	Hoechst Aktiengesellschaft, Farbwerke Hoechst Aktiengesellschaft, Vormals Meister Lucius Bruming 45, Bruningstrasse, Frank- furt/Main, F.R.G.	Process for the manufacture of water soluble moneazo dyestuffs.
130690	23-3-1971	Do,	Process for the manufacture of metal containing azo dyestuffs.
132355	3-8-1971	Do.	Process for the preparation water soluble manoazo dyestuffs.
131552	31-5-1971	Do.	Process for the manufacture of soyl acetic acid aryl amides.
132930	16-9-1971	Dσ.	Process for the manufacture of water soluble fibre-reactive disazo dyestuffs and their metal complex compounds.
133137	6-10-1971	Do.	Process for preparing water-soluble monoazo dyestuffs.
133139	6-10-1971	Do.	Process for manufacture of metal complex monoazo dyestuffs.
133325	22-10-1971	Do.	Novel process for the manufacture of ben- zimida-zolone-(2).
133378	27-10 <b>-1971</b>	Do.	Process for the manufacture of new Water soluble fibre-reactive azo dyestuffs.
133710	23-11-1971	Do.	Process for the manufacture of copper-complex moazo dyestuffs.
133738	25-11-1971 .	Do.	Process for proparing of Water-soluble disaze dyestuffs.

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135810.	4-9-1972	Do.	Process for the preparation of fast dyeings and prints on fibrous material containing hydroxyl groups on nitrogen.
136237	21-8-1972	Do.	Process for preparation of novel Water soluble monoazo dyestuffs.
136833	2-11-1972	<b>Do.</b> .	Prosess for preparaton of sulfuries acid ester of 1-aminobenzen -4-(B-hydroxyethyl-sulfone)-2-si; fpmoe. acid.
137575	10-4-1973	Do	Improvements in or relating to heavy media separation of minerals.
131896	28-6-1971	Texaco Development Corporation, 135, East 42nd Street, New York-10017 U.S.A.	A partial oxidation process for producing synthesis gas.
132456	10-8-1971	Do.	Aprocess for the productin of carbon mono- zide and hydrogen by direct partial oxidation and liquid hydrocarbon.
135805	23-10-1972	Do	Process for the preparation of a reducing gas.
134415	12-9-1972	Council of Scientific & Industrial Research, Rafi Marg, New Delhi.	A process for the production of high purity Water by solar still.
136556	12-5-1972	Do	Urethane varnish bared on cartor oil as a top coat for patent leathers.
136973	23-7-1973	Do.	Improvemens in or relating to method sintering nickel to produce thin sintered plaques for alka ine battery plates.
137046	7-8-19 <b>72</b>	Do.	A process for the deminerasation of neutral or beneficiated graphites.
130178	4-2-1971	Rindustan Lever Limited, Hindustan Lever House, 165-166, Backbay Reclamation Bombay-20, India	Improvements relating to the treatment of karanja oil.
134009	20-12-1971	Do	Process for preparing a supported nickel catalyst.
135899	23-5-1972	Hindustan Lever House, 165-166 Backbay Reclamation Bombay-20, Maharashtra, India	A method of protecting hypochlorites for inclusion in a detergent composition.
137023	15-12-1972	Do·	A process for preparing a supported nickel catalyst.
137275	17 <b>-7</b> -1972	Do.	Skin moisturires based on glutamic acid and/ or glutamine and/or their salts.
139618	17-8-1973	Do.	Detergent compositions.
132267	27-7-1971	Johnson and Johnson, 501 George Street, New Brunswick, New Jersey, U.S.A.	Bonded non-woven fabrics method of making the same and synthetic resin binder compo- sitions used therein.
134816	3-3-1972	Do.	Method of making strable plaster of paris composition.
134832	4-3-1972	Do	Method of improving gypsum cast farming composition.
136768	27-7-1972	Do	Improvements in or relating to synthetic resin binder composition for bonding porous, absorbent, fibrous materials.
136810	16-6-1972	Do.	A process for preparing pressure sensitive adhesive composition.
136811	15-6-1973	Do.	A process for preparing acrylate adhesive composition,

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132929	16-9-1971	Sharritt Gordon Mines Limited, 2800 Commerco Court West, Toranto Ontario Canada.	Method for preparing nickelferous laterite are mixtures for reduction roasting.
134679	19-2-1972	Do.	Process for the treatment of nickel and cobale bearing material.
135150	4-4-1972	Do.	Method for reduction roasting nickelferous laterite ores.
135741	1-5-1972	Do.	Production nickel powder from basic nickel carbonate.
136321	19-5-1972	Do.	Production of nickel powder from basic nickel carbonate.
137244	1-2-1973	Do.	Recovery and separation of nickel and cobalt from reduced laterite nickel ore.
130861	6-4-1971	Stamicarbon B.V., Geleen, The Netherlands.	Process for separating melamine from a hot synthesis gas mixture which contains melamine vapour.
130923	12-4-1971	Stamicarbon N.V., Van de Maesenstvatt 2, Heerlen, The Netherlands.	Process for increasing the corrosion resistance of austenific stainless steels.
134536	8-2-1972	Do.	Processing plant for processing at elevated temperature solutions containing ammonium carbonate.
134070	27-12-1971	Do	Improved process for preparing urea.
137974	28-4-1973	Stamicarbon B.V., P.O. Box 10 Geleon, The Netherlands,	Process for stabilizing polymers.
130088	28-1-1971	Solvay & Cie, 33, Rue du Prince Albert, B-1050 BRUSSELS, Belgium.	Process for the preparation of Zeigler-natta- type catalyst.
132827	8-9-1971	Do.	Process for the polymerization of olefines.
137049	29-11-1972	Do.	Process for the polymorization of olefines.
130121	1-2-1971	Imperial Chemical Industries Ltd., Imperial Chemical House, Mill Bank, London S.W.1, England.	Treatment of brine.
130361	25-2-1971	Do.	Process & apparatus for cooling extruded-tubing.
131405	18-5-1971	International Nickel Ltd., Thames House Mill Bank London SW. 1, England	Treatment of corrosion resistant chromium- containing alloy
134694	21-2-1972	Do.	Process for the preparing of chromium nickel alloy products.
135878	20-6-1972	Do .	Improvements in or relating to a method of obtaining a coloured chromium containing alloy.
135231	11-4-1972	Unilover Limited, Unilever House, Black friars, London E.C 4, England.	A process for the preparation of an instant tea powder.
135328	19-4-1972	Do.	Do.
136930	5.2.1973	Metallgesellschaft AG., 16, Frankfurt A.M. Reuterweg 14, West Gormany.	Process of producing sponge iron.
137013	9-3-1973	Do.	Pyrometallurgical process for treating solids.
136245	27-4-1972	Aikoh Co. Ltd No. 1-39, 2 Chome, Skenohata, Jaito-ku, Tokyo, Japan	A desulfurising agent for a molten pig iron.
136430	27-6-1972	Do.	An improved method forming ingots of molten metals.
131903	29-6-1971	Southwire Company, 126 Fertill. Street, Carrollton, Georgia 30117 United States of America.	Process for preparing an aluminium base alloy conductor.
133299	21-10-1971	Do.	Method of producing an aluminium alloy,

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121974	24-6-1969	Snamprogetti S.p.A., 16 Corso Venezia, Milan, I	•
128419	14-9-1970		A process for separation of iron from zinc sulphate solution.
128624	29-9-1970	The Fertilizer (Planning & Development) India Ltd., P.O. Sendre, Dist-Dhaulad, Bihar India.	Liquid phase oxidation of olefin to olefin oxides glycols and glycol esters.
129618	16-12-1972	Castrol Limited, Burmah-Castrol House, Marylebone Road, London NW1, England.	Hydraulic fluid comprising synthetic ortho- ester and a process therefor,
129961	15-1-1971	Japan Gas Chemical Co., Inc., 5-2, Marunchi 2-Chome, Chiyodo-ku, Tokyo, Japan.	Process for producing formaldehyde aqueous solution having a low methanol content.
131044	20-4-1971	General Electric Company, 1, River Road, Schoneetady, N.Y. United State of America.	Process for producing a sintered cobalt-rare earth intermetallic product.
131885	26-6-1971	Girling Limited, Kings Road Tyseley, Birmingham 11, England.	Improvement in or relating to lining wear catalyst.
132263	27-7-1971	Osterreichisch-Amerikanische Magneit AG, of Body Ralefhein, Karnaten, Austria.	Process of producing a sintered refractory material.
132454	10-8-1971	E.I. Du Pont De Namours & Company, Wilmington, Delaware, U.S.A.	Emulsion type blasting agent.
132627	23-8-1971	Establishment Salgad, Vadus, Liechtenstain.	Explosive device.
132809	28-2-1972	Dr. Santosh Kumar Gupta- Research & Development Organisation for electrical Industry, Ministry of Industrial Development, Government of India, P.O. Piplani, Bhopal-21, M.P.	A process for the conversion of mica into pulp suitable for making micapaper and other materials.
133356	26-10-1971	Pfizer Inc., 235 East 42nd Street, New York, State of New York, United States of America.	Fermentation process for the production of citric acid.
133734	25-11-1971	Ciba-Geigy (UK) Limited, 30 Buckingham Gate, London SW1E 6LH, England, Klybeckstrasse 141, Basle, Switzerland.	Treatment of water systems for preventing scale formation.
133821	1-12-1971	Ethicon Inc., Somerrillo, New Jersey, United States of America.	Process for obtaining a sterile absorbal surgical suture.
134146	31-12-1971	Cluett, Peabody & Co., Inc., 433 River Street, Troy, New York, United States of America.	Method & apparatus for quickly treating fabrics with liquid ammonia.
134794	2-3-1972	Pecinnoy Ugine Kuhimann 10 Rue De Genera Foy Paris 8cme France.	A method for the manufacture of gas mix- tures suitable for the production of sulphuric acid and apparatus therefor.
134872	8-3-1972	UOP inc. Ten UOP plaza Algonquin & Mt. Prospect Roads Des Plaines Illinois 60017 United States of America.	Regeneration of a coke deactivated catalyst comprising a combination of platinum rhenium and halogen with a perous carrier material.
135902	10-7-1972 ·	The Goodyear Tire & Rubber Company 1144 East Market Street Akron Ohio, United States of America.	A process for preparing 2 (4-menpholino dithio)-benzo thiozole
135947	28~4-1972	Bee Cham Group Ltd. Beecham House Great Wdst Road Brentford Middlesex. England.	Oral hygiene compositions.
136375	1-12-1972	Eisenwerk Gesellschaft Maximilianshutte mbl 8458 Sulzabach-Rosenbert, West Germany.	h Process for refining low-phosphorus pig iron to make steel.
139309	2-7-1973	Unie Van Kunstmestfabrieken B.V., P.O. Box No. 45, Utrecht, The Netherlands.	Process for preparing urea.
139310	2-7-1973	Do.	Process for preparing urea.
139403	12-7-1974	Spamprogetty S.p.A., 16 Corso Venezia, Milan Italy,	Process for separating dioletius from Mixtures containing the same
137507	20-3-1974	Hindustan Lever Limited, 165-166 Backbay Reclamation, Bombay-20, Maharashtra, India.	Process for the dehychoxylation of hardened easter oil.
139257	18-7-1973	Do∙	A visaually lear toothpaste-

# COMMERCIAL WORKING OF PATENTED INVENTIONS

MECH: ENGG. LIST III

The following Patents in the field of Mechanical & General Engineering Industry are not being commercially worked in India as admitted by the Patentees in the statements filed by them under section 146(2) of Patents Act, 1970 in respect of calender Year 1985 generally on account of want of requests for licences to work the Patented inventions. Persons who are interested to work the said Patents commercially may contact the Patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name & & Address of Patents	Title of the inventions
i		3	4
150097	4-7-1978	RCA Corporation. 30 Rockofeller Plaza, New York-10020, U.S.A.	Apparatus for optically testing the lateral dimensions of a diffracting grating pattern of material disposed on a substrate.
120301	18-6-1979	Dr Warner Freybeig Chemische Fabric De- litia Nachf. Bergstrasse. 6941 Laudenbach. Federal Republic of Germany.	Applicator means for pest control agents.
150425	29-5-1978	Henri Charles Vidal, 8 bis, Boucevard Maillot Neuilly 92, France	An improved stabilized earth structure.
150432	24-8-1978	Anstalt Mora, Im Lett 26, Vadoz, Principality of Liechtenstein.	Apparatus for the production of carbon black.
150509	23-6-1978	REXNORD INC., 4701 W. Greenfield Avenue, Milwaukee, Wisconsin, U.S.A.	Method & apparatus for coating the inner surface of a pipe.
150622	2 <b>2</b> -10-1979	Hollingsworth (U.K.), Seatte liffe Street, Accongton, Lancashire BB5 orn, England.	Improvements relating to open-end spinning apparatus.
150764	4-12-1978	Motor- Industries Co. Ltd., Hosur Road, Adu- godi, Bangalore-56,0030 India.	Centrifugal governor particularly for varying the instant of spark ignition or instant of fuel injection in internal combustion engine.
150945	13-10-1978	American Standard Inc. 40 West 49th Street New York, New York 10018, United States of America.	Housing for draft goar.
150984	12-3-1979	Amstar Corporation, 1251 Avenue of the Americas, New York, N. Y. U.S.A.	A clarifier or thickener apparatus useful for separating solids from a liquid feed containing solids suspended therein.
151024	16-11-1978	Schubert & Salzer Maschinentabrik AG., A Friedrich-Ebert-Strasses 84, 8070 Ingolstadt, Germany.	Apparatus for making a join in a bound yarn
151080	6-10-1978	The University of Manchester Institute of Science & Technology, Etruria Works, Stock on trecht. Staffordshire, ENGLAND	Apparatus for growing micro-organisms with a supply of sultable $n_{tt}$ trient material.
151121	10-10-1979	Franz Plasser Bahnbaumuschinen-Industriegesellschaft M.B.H., Johnanesgasse 3, Vienna Austria.	Improved track building machine for distri- buting and profiling the bedding ballast of a railway track.
151125	6-2-1979	Do.	Improvements in or relating to travelling track tamping machine.
151302	17-6-1979	Amerace Corporation, 555 Fifth Avenue, New York, New York, 10017, United States of America.	Acturable rubber composition for producing microporous articles.
151444	12-11-1979	Societe De Paris Et Du Rhone, 36 Avenue Jean Mermoz, 69008 Lyon, France.	An elastic element for connecting the shaft of the moving element of a contractor and the corresponding contact.
151517	22-7-1981	Voost-Alpine Aktiengesellschaft, A. 1011 Vienna, Friedrichstrasse-4, Austria.	Tracklaying cutting machine.

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151523	6-9-1979	Lim Kunststoff-Technologie Gesellschaft m.b.H., 2421 Kittsce, Austria.	Process of manufacring pncumatic tires and apparatus for carrylung out the process.
151538	2-2-1980	KRW Energy Systems, Inc., 3 Greenway Plaza Houston, Texas 77046, U.S.A.	Fluidized bed injection assembly for coal gasification.
151575	7-5-1980	Franz Plasser Bahnbaumaschinen Industriege- sellschaft M.B.H., Johannesgasse 3, Vienna 1, Austria.	Improvements in or relating to travelling on- track machine.
151582	14-3-1979	NRM Corporation, 3200 Gilchrist Road, P. O. Box 6338, Akron. Ohio 44312, United States of America.	A tire component servicer.
151668	8-3-1979	Gebruder Adams Armaturen N. Apparate GMBH., D.4630 Bochum, Postfach 100105 West German.	Improved disc valve.
151670	5-4-1979	F. L. Smidth & Co. A/S., 77 Vigerslev Alle, DK-2500 Valby, Copenhagen, Denmark.	Planetary cooler suspension.
151678	27-7-1979	Societe De Paris Et Du Rhone, 36 Avenue Jean Mermoz 69008. Lyon, France.	Improvements in actuators for the starters of internal combustion engines.
151772	13-5-1979	American Standard Inc., 40 West 40th Street, New York, New York 10018, United States of America.	Improved freight brake control valve device.
151782	11-6-1980	Associated Engineering Italy S.P.A., Strada Valdellatorre K. M. 2700 Alpignano, Turin, Italy.	An Improvement relating to the diesel engine pistons.
151945	28-1-1980	Zahnradfabrik Friedrichshafen A.G., Postfach 2520. D-7990 Friedrichshshafen 1. West Germany.	Control valve for controlling pressurised media in hydraulic circuits.
152096	23-9-1980	Sulzer-Ruti Machinery Works Ltd., 8630 RTl, Zruich, Switzerland.	Apparatus for coupling a harness motion for a harness frame.
152107	6-3-1980	Societe De Paris Et Du Rhone. 33 Avenue Jean Mermos 39008, Lyon; France.	Actuators for starters of Internal combustion engines.
152163	16-1-1980	Schubert & Sulzer Maschinenfabrik AG., Friedrich-Ebert Strasse 84, 8070 Ingolstadt, Germany.	Apparatus for producing a bound yarn.
152170	30-5-1981	Dr. C. Otto & Comp. GmbH., Christstrasse 9, Postfach 4630, Bochum. West Germany.	Closing and opening device for use in coke ovens.
151223	23-7-1979	Palitex Project Company GmbH. Weeserwog 8,4150 Krefeld. West Germany.	A thread take-up assembly.
152267	27-7-1979	Palitex Project Company GmbH., Weese weg 8 4150 Krefeld 1, West Germany.	Device for de-activation and re-activation of textile apparatus more especially a two for one twisting spindle.
152273	4-10-1979	A Ahlstrom Oy., Noormarkoo, Finland.	An apparatus for pumping gaseous liquids.
152342	28-1-1980	Koninklijke Emballage Industrio Van Leer B. V., Amsterdamseweg 206, 1182 HL, Amstelveen, The Notherlands.	A method & tool for producing a bushing structure having a polygonal flange.
152339	9-9-1980	Sulzer-Ruti Machinery Works Ltd., 8630 Ruti, Zurich, Switzerland,	Gripper head for a loom for removal of a filling thread from stationary bobbins.
153370	17-1-1981	Krw Energy Systems, Inc., 3 Greenway Plaza, Houston, Texas 77046, U·S.A.	A fluidized-Bod combustion apparatus and that they are the assignce(s) of westing-house electric corporation who is turn at the.
152379	9-9-1980	Sulzer-Ruti Machinery Works Ltd., 8630 Ruti. Lorich, Switzerland	A filling thread-insertion element for looms.
1 <b>22</b> 439	10-9-1980	Voest-Alpine Aktiengeschlschaft, A-1011 vienna, Friedrish Strasse 4, Austria.	Conveying equipment for a mining machine.

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152471	30-5-1981	Lucas Industries Ltd., Great King Street, Bir- mingham, England.	Hose connector.
152503	8-7-1980	Sid Richardson Carbon & Gasoline Co., Forth Worth National Bank Building, Fort Worth, Texas 76102, United States of America.	An improved carbon black producing apparatus.
152515	7-12-1979	Dr. C. Otto & Comp. GmbH., Christstrasse '9, Postfach 4620, Bochum, West Germany.	Vertical chamber for the continuous dry quenching of coke.
152537	4-1-1982	Ruti-Te Strake B. V., Deurne, The Netherlands	Jet weaving machine.
152558	5-4-1980	Schubert of Salzer Maschinenfabrik AG., Friedrich-Ebert-Strasse 84, 8070 Ingolstadt, West Germany.	Housing for receiving a thread monitoring unit which comprises a thread tension sensor.
152560	2-5-1980	Franz Plasser Bahnbaumaschinen-Industriege- sellschaft M.B.H., Johannesgasse 3, Vienna 1, Austria.	Device for removing irregularities and ridges from rail head surface.
152599	8+5-1980	Trans Med Corporation, 1621 Collingwood Drive, San Diego, California, U.S.A.	A collector for collecting diagnostic specimen of fluids e.g. Blood, Urine, Milk from human or animals.
152640	9-10-1979	Zahnradfabrik Friedrichshafen AG., 7990 Friedrichshafen 1, Germany.	Hydrostatic steering system.
152644	28-2-1980	Corning Glass Works, Houghton Park. Corning New York 14830, United States of America.	Apparatus for forming an optical waveguide bank.
152657	30-6-1980	Dr. C. Otto & Comp., GmbH., Christstrasse 9, Postfach 4630, Bochum, West Germany.	A method of manufacture of coke.
152680	2-6-1980	Do.	A method of renewing the brickwork of coke ovens.
152683	9-9-1980	Sulzer-Ruti Machinery Works, Ltd. 8630 Ruti Zurich, Switzerland.	Drive device for the band wheel of bandgripper loom.
152729	8-2-1980	Stamicarbon B. V., P. O. Box 10, Geleen, The Netherlands.	Process for making polymer filaments of high tensile strength and modulus.
152738	25-7-1980	Carl Oscar Alexander Ekman, Box 55, 18251 Djursholm 1, Sweden.	A furnace for burning solid fuel.
152740	2-8-1980	Westinghouse Electric Corporation, Westing- house Building, Gateway Center, Pitsburgh, Pennsylvania 15222, U.S.A.	A method of applying an entire flective coating on silicon and a coated silicon chip there by obtained.
152743	23-10-1980	Omark Industries Inc., 5550 S. W. Macadam Avenue, Poritland, Oregaon-97201, U.S.A.	A railroad sleeper.
152747	1-4-1981	Outokumpu Oy, of Pansiontle 45-47, SF-20210, Turku 21, Finland,	Copper wire having corrosion-resistant care for intrauterine birth control device and a method for manufacturing the same.
152750	7-4-1979	Zelacolor Systems Establishment, Vaduz, Licohtenstein.	Apparatus for making photographic images on films.
152763	4-8-1980	SCHUBERT & SALZER MASCHINEN-FABRIK AG., of Friedrich-Ebert-Strasse 87, 8070, Ingolstadt, Germany.	Open-end spinning apparatus.
152766	31-10-1980	DR. C. OTTO & COMP. GMBH., of Christstrasse 94630 Bochum, West Germany.	Coke car for coke ovens.
152180	5-2-1980	UNILEVER PLC, Unilever House, Blackfriars, London EC 4, England.	A method of preparing fired tea leaf in the form of pellets and the pellets so obtained.
152803	14-10-1980	SCHUBERT & SALZER MASCHINEN-FABRIK AG., of Friedrich-Ebert-Strasse 84, 8070, Ingolstadt, Germany.	A device for extracting inpurities from fibre material in particular cotton.
152816	22-11-1979	Shell internationale Research Maatschappij B. V. of Carel van Bylandtlaan 30, The Hague, Holland.	Apparatus for injecting particulate polymer into a pipeline hydrocarbons.

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152871	21-12-1979	SCHUBERT & SALZER MASCHINEN- FABRIK, AG., of Friedrich-Ebert-Strasse, 84, 8070, Ingolstadt, West Germany.	Control apparatus for a fibre feed device in an open end spinning equipment.
152879	23-7-1980	SCHUBERT & SALZER MASCHINEN-FABRIK AG., of Friedrich-Ebert Strasse 84, 8070, Ingolstadt. Germany,	Method and apparatus for producing a bound thread incorporating therein at least one thread join.
152889	11-4-1980	Khoo Tian, of 3168, Jalan pudu, Kuala Jumpur, Malaysia. 3	Bricks.
152904	-4-9-1979	Mitsubishi Jukogyo Kabushiki Kaisha. of 5-1, Marunobchi 2-chome, Chiyoda-ku, Tokyo, Japan.	Cargo handling equipment used at the shore of a river or a creek.
152908	25-2-1980	Lothar Teske, of Hegelstr. 15, 5000 Koln 90. West Germany.	A bunker clearance vehicle.
152919	18-11-1980	Viest-Alpine Aktiengesellschaft, A-1011, Vienna, Fried, richstrasse 7, Austria.	Movable bucket wheel excavator.
152955	18-8-1980	British Railways Board, of 222 Marylebone Road, London, N.W. 1 England.	A railway vehicle or bogie.
152970	1-2-1980	Hubert Eirich, of Sandweg 16, 6969 Hardheim, West Germany.	Apparatus for closing a discharge opening in a rotary table.
152972	7-3-1980	DOBSON PARK INDUSTRIES Ltd., of Dobson Park House, Colwick Industrial Estate, Colwick, Nottingham NG4, 2BX, England.	Mino-roof supports.
15 <b>3</b> 011	16-5-1980	AMERICAN STANDARD INC., of-40 West 40th Street, New York, New York 10018, U.S.A.	Fluid pressure brake apparatus for a railway vehicle.
153032	29-2-1979	F. L. SMIDTH & CO. A/S of 77 Vigerslev Alle, DK-2500, Valby, Copenhagen, Denmark.	Method of dry grinding a granular material and apparatus therefor.
153040	27-10-1980	MAN MASCHINENFABRIK, AUGS- BURG-NURNBERG AG, Postfach 1102, 40, 4200 oberhausen 11, F.R.G.	Coal gas treatment apparatus.
153043	18-2-1981	Flogates Limited, Sandiron House. Vesuchier, Sheffield, S72 RA, England.	Reclaiming sliding gate valve components.
153075	1-3-1982	James Lawrence McCANN, 205-8860 No. 1 British, Road, Richmond, Columbia, Canada VTC, 4C1.	Rotary internal combustion engines.
153081	25-7-1980	TECUMSEH PRODUCTS COMPANY, Michigan U.S.A. of Tecumseh, Michigan, 49286, U.S.A.	A radial compressor.
153083	27-8-1980	PALITEX PROJECT-COMPANY Gmbh., Woeserweg 8, 4150, Krefeld 1, F.R.G.	A two-for-one spinning or twisting spindle having a compressed-air operated-threading arrangement.
153111	29-1-1981	CORNING GLASS WORKS, Houghton Park, Corning, New York 14830, U.S.A.	A wave guide preform and a method of forming the same.
153112	1-1-1981	VOEST-ALPINE AKTIENGESELL- SCHAFT, A 1011 Vionno, Friedrichstrasso 4, Austria.	System for monitoring the movement of a cutting tool of a tunnel-driving machine relative to a desired profile.
153118	24-9-1979	HOLLINGSWORTH GMBH, 7265 Neubulach 5, West Germany.	An opening roller for open-end spinning machines.
153156	7-12-1979	The Timken Company, 1835 Dueber Ave, Southwest, Canton Ohio,	Multirow bearing.
153162	14-8-1980	Eduard Kusters, of Gustav-Funders—Weg 18, 4150 Krefeld, F.R.G.	Improvements in or relating to a method and apparatus for the heatment of a web.
153165	13-9-1980	Institute of Gas Technology, 3424, Sooth State, Street, Chicago, Illinois, 60616, U.S.A.	A reactor and a method for converting carbonaceous particles to a fuel gas.

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153175	28-10-1931	Atlas Copco Aktiebolag, Nacka, Sweden.	Method & Apparatus for rock bolting.
153187	28-9-1979	Hollingsworth GMBH, 7265, Neubulach 5, West Germany.	Carding plate.
153188	28-9-1979	Hollingsworth GMBH, 7265, Neubulach 5, W.G.	A dirt separator for cards having a cylinder and Fixed by mounted carding segments co-operating therewith.
153195	11-9-1979	Fexto-Maschinenfabrik Gottlieb Stroll of Ulmer Strasse 48, Esslingen, Germany.	Rotary slide valve.
153218	8-4-1981	Unie Van Kunstmestfabricken B. V., of P.O. Box 45, 3500, AA Utrecht, the Netherlands.	Process for making wea pritts.
153240	23-10-1979	I.S.C. SMELTING LIMITED, of 6th James Square, SW1Y, 4LD, England.	Lead splash condenser.
153259	11-9-1979	BAKELITTFABRIKEN A/S., of Drammensveicn 30, Oslo 2, Norway.	Method of producing molded bodies of espanded plastic.
153268	2-6-1980	DR. C. OTTO & COMP. GMBH., of Christstrasse 9, 4630, Bochum, West Germany.	A coke oven battery.
153277	4-12-1980	DR. C. OTTO & COMP. GMBH, of Christstrasse 9, 4630 Bochum, West Germany.	Door extractor for the closures of horizontal coke vens.
153281	16-3-1981	DR. C. OTTO & COMP. GMBH., of Christstrasse 9, 4630 Bochum, West Germany.	A system for improving the flow in the ducts between the regenerators or recuperators and the combustion chambers of industrial gas-fired systems, more particularly coke ovens.
153289	29-12-1980	Hamon-Sobelco, of 50—58 Rue Caporillet 1060, Brussels, Belgian Company.	$\Lambda$ corrugated streaming street for a furnishing device.
153313	25-8-1980	Xerol Corporation, of Xerox Square, Rochester, New York, 14644, U.S.A.	An automatic xerographic reproducing apparatus.
153318	16-3-1981	DR. C. OTTO & COMP. GMBH., of Christstrasse 9, 4630 Bochum, West Germany.	A method of manufacturing coke by optimum distribution of vertical temperature of heating of rich gas in coke ovens and an apparatus therefor.
153321	5-9-1981	BRITISH RAILWAYS BOARD, of 222 Marylebone Road, London, N.W.1., England	Measuring vehicles for readways.
153338	2-6-1980	DR. C. OTTO & COMP. GMBH., of Christstrasse 9, 4630, Bochum, West Germany.	Extraction of gases evolved in the charging of coke ovens.
153339	24-11-1980	DR. C. OTTO & COMP. GMBH., of Christstrasse 9, 4630, Bochum, West Germany.	Coke oven battery adapted to be regeneratively heated by Dean gas or rich gas at choice.
153406	9-4-1980	DEREK ERNEST STEELE, of 61A Baden Terrace, O'Sullivan Beach, State of South Australia.	Grain moisturo testing apparatus.
153482	19-8-1980	Sandvik Aktiebolag, S-811, 81, Sandviken, Sweden	Cutter drum for a road plarming machine.
153499	13-4-1981	WEDCO. INC., of Bloomsbury, New Jersey, U.S.A.	Improved process and apparatus for heat treating a finely divided particulate polymer material. Such as polyethylene, Polypropylene or reactor flake.
163518	15-5-1979	SCHUBERT & SALZER MASCHINEN-FABRIK AG., of Friedrich-Ebert-Strasse 84, 8070 Ingolstadt, West Germany.	Method of cladding a housing of an opener device for an open end spinning machine and a cladded housing obtained thereby.
153557	24-12-1979	ICI LTD, Imperial Chemical House, Mill bank London, SWIP JF, England.	Method and apparatus for the manufacture of fuse cord.
153558	24-12-1979	Canadian Industries Ltd., Imperial Chemical House, Millbank, London, SWIP 3 JF, England.	Method and apparatus for helically spinning stranded reinforcing wrapping material on explosive fuse cord.
153559	24-12-1979	Do.	Method and apparatus for the manufacture of fuse cord.

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153570	25-2-1980	DR. C. OTTO & COMP. GMBH., of Christstrasse 9, 4630, Bochum, West Germany	Nozzle provided with several outlet apertures for coke ovens.
153598	5-2-1980	J. Ray McDERMOTT & CO. INC., at 1010 Common Street, New Orleans. Louisianna 70112, U.S.A.	A method of installing a deep water offshore structure.
153601	24-4-1980	Zahnradfabrik Frledrichshafen AG., of Postfach 2520, D-7900, Friedrichshafen 1, West Germany.	Rotary slide valve control device.
153604	28-8-1980	SULZER BROTHERS LIMITED, of CH-8401, Winterthur, Switzerland.	Steam throttle valve.
153653	15-6-1981	Sealed Power Corporation, of 100 Terrace Plaza, Muskegon, State of Michigan 49443, U.S.A.	A transmission fluid filter.
153663	18-1-1980	WOOL DEVELOPMENT INTERNATION. AL LIMITED, of Wool House, Carlton Gardens, London SW1Y, 5AE., England.	Strand break-out device.
153705	27-5-1981	MACART TEXTILES (MACHINERY) LIMITED., 162/172 Thornton Road, Brad- ford West Yorkshire, England.	Rapier looms and rapier heads therefor.
153705	27-5-1981	Micart Textiles (Michinery) Limited., 162/172 Thornton Road, Bradford, West Yorkshire, England.	Rapier looms and rapier heads therefor.
153722	26-9-1980	HAMWORTHY ENGINEERING LTD., of Fleets, Corner, Poole Dorset, BH17, 7LA, England.	A reciprocatory machine having a pair of opposed pistons,
153742	17-3-1981	TEGRAL TECHNOLOGY LIMITED, 19, Lower Pembroke Street, Dublin 2.	Method of making an asbestos free glass fibre reinforced cement composite products.
153748	4-9-1981	Worcester Controls (UK) Limited, of Burrel Road, Hayward Heath, Sussex, England.	Apparatus for generating linear motion.
153886	15-5-1980	Sealed Power Corporation, of 100 Terrace Plaza, Muskegon, State of Michigan, 49443, U.S.A.	Arrangement for removably fastening a deformable member to a separate body.
153891	14-8-1980	F. L. SMIDTH & CO., A/S., of 77 Vigerslov Alle, DK-2500 Valby, Copenhagen, Denmark.	Nozzle ring assembly for a roller mill.
153894	24-12-1980	HERMANN HEMSCHEIDT MASCHI- NENFABFRIK GmbH & Co. of Bornberg 103, 5600, Wuppertal 1, German Federal Republic.	Apparatus for maintaining a set between centres distance between support elements of a self-advancing mine roof support.
153908	21-6-1980	AKZOav., of Ijssellaan 82, Arnhom, the Notherlands.	A method of producing crystalline filaments mek-spun from synthetic polymers which are stretched to orientate the molecules.
153910	2-8-1980	PALITEX PROJECT-COMPANY GmbH., of Wooserweg 8, 4150 Krefeld 1, West Germany.	Thread storage member for two for one twisting spindle or spinning spindle.
153929	24-4-1980	ZAHNRADFABRIK FRIEDRICHSHAFEN AG., of Postfach 2520, D-7900 Friedrich-shafen 1, West Germany.	Rotray slide valve control device.
153934	2-8-1980	PALITEX PROJECT-COMPANY GmbH., of Wesserweg 8, 4150 Krefeld 1, East Germany.	Two-for one twisting spindle with a supply receptacle for a lubricant.
153955	5-3-1981	BARR & STROUD LIMITED, of Caxton Street, Anniesland, Glassgow, G13. 1HZ. Scotland.	A focal refractor telescores.
153976	24-11-1981	SULZER-RUTI MACHINERY WORKS LTD., of 8630 Ruti, Zurich, Switzerland.	Weft break stop motion.
154031	16-12-1980	Man Mashinenfabrik, Augsburg-Nurnberg AG. Katzenwangerstrasse 101, Nurnberg 24, F.R.G.	Coal gas purification apparatus.

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154038	31-1-1981	BATTELLE DEVELOPMENT CORPORA- TION, U.S.A. at 505 King Avenue, Columbus, Chio 43201, U.S.A.	A method for generating and superheating steam and an apparatus therefor.
154059	30-3-1981	STAMICARBON B.V of P. O. Box 10. Geleen, the Netherlands.	Device for the spraying of a liquid by means of a gas.
154097	1-12-1980	Voost-Alpino Aktiongesollschaft, A-1011, Vionna, Friod richstrasso 4, Austria.	Movable bucket wheel excavator.
154098	17-1-1981	Harold J. Heinen, Gene E. McClelland and Roald E. Landstrom, 4990, Golden Springe Drive, Reno. Nevado 89509, U.S.A.	A process for percolation reaching of precious metals such as Gold and/or silver ores.
154099	31-1-1981	F. L. SMIDTH & CO. A/S, of 77 Vigersleve Alle, DK-2500, Valby, Copenhagen, Donmark.	A vertical roller mill with a grinding table rotating about a vertical axis and at least two grinding rollers rotating about stationary shafts.
154140	9-1-1980	Marco Gatti, Via Bonaldo Stringher 27, 00191, Roma, Italy.	Apparatus for unloading dry coads from ships.
154154	28-3-1981	BARR & STROUD LTD., of Caxton Street, Anniesland, Glasgow, G13, 1HZ, Scotland.	Collimation lens system.
154157	28-4-1981	DR. C. OTTO & COMP. GNBH., of Christstrasse 9. 4630, Bochum, West Germany.	Latching mechanism on coke oven doors.
154211	26-5-1981	SCHUBERT & SALZER MASCHINEN- FABRIK AG., of Friedrich Ebert-Strasse 84, 8070, Ingolstadt.	Apparatus for effecting a thread join in a a bound yarn.
154250	6-3-1981	BEHEERMAATSCHAPPIJ H. D. GROENEVELD B. V., of No. 542, Rinkdijk 2987 VZ Bolnes, The Netherlands.	A fire-proof wall.
154254	10-3-1980	POLAROID CORPORATION, 549, Technology Square, Cambridge, MA-02139, U.S.A.	A coupling device for coupling light intelligence between fiber optic elements.
154350	24-7-1980	Societe Lab., 159 Cours Albert Thomas, 69003, Lyon, France.	Centrifugal separators.
154361	18-6-1981	NEUMANN EQUIPMENT PTY. LTD., of Nuban Street, Currumbin, Queensland 4223 Australia.	Improvements in dredges.
154429	26-5-1981	SCHUBERT & SALZER MASCHINEN- FABRIK AG., of Friedrich Ebert-Strasse 84, 8070, Ingolstadt, West Germany.	Device for sealing off a rotor guide bore of a rotor housing.
154436	3-7-1981	CORNING GLASS WORKS, at Houghton Park, Corning, New York-14830, U.S.A.	An optical wave guide soot preform and method of making.
154440	17-7-1981	PETER JAMES GRIFFIN, of 13/40, Bayswater Road, Kings Cross, in the State of New South Wales,	Rotary motion conversion device and rotary mechanism.
154469	1-10-1980	Hariacher AG., Garterestrasse 7, 8902 Urdorf/ZH, Switzerland.	Apparatus for coating a flat printing screen on one or both sides with a photosensitive emulsion.
154479	17-10-1981	F. L. SMIDTH & CO. A/S., of 77 Vigerslaev Alle, DK-2500, Valby Copenhagen, Denmark.	Drive for rotating drum.
154626	1-7-1981	Natija Cenanovoic of 2567 Annelyn Court, Mississauga, Ontario, Canada, L5C, 2Z7.	Method for repairing a metal pipe by expanding it by a controlled amount at a predetermined location there along and a device for carrying out said method.
155368	5-1-1982	SULZER-RUTI MACHINERY WORKS LTD., of 8630 Rutl, Zurich, Switzerland.	Device for storing filamentary material and looms comprising the same.
155876	11-6-1982	Carclo Engineering Group Ple., of Acre Street, Lindley, Huddersheld, West York, shire, England.	A card clothing assembly and a method of producing a card-clothing assembly.

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133319	18-9-1975	AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION, P. O. Polytechnic, Ahmedabd-15, Gujarat.	An Instrument to Measure and Control Humidity and Driving Condition, in Het Air Machines.
144503	25-10-1976	AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION, P. O. Polytechnic, Ahmedabad-15, Gujarat.	A device for detecting recording and measuring tightness and slackness in a closed loop oscillating system and modified shedding mechanism for a look.
145913	5-7-1977	AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION, P. O. Polytechnic, Ahmedabad-15, Gujarat.	Improved process for wet treatment of textile and an apparatus for carrying out side process.
147014	1-8-1977	$D_0$ .	Instrument to Measure and Indicate the Speed of Shuttle on Loom.
147289	2-5-1978	D <sub>0</sub> .	Improvements in or relating to the method and equipment for improving the quality of sizing of warp yarns.
147745	22-7-1977	AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION, P. O. Polytechnic, Ahmedabad-15, Gujarat.	A rapid Abrasion Testing Means for Textile Fabrics.
149282	13-6-1979	$D_0$ .	A Novel Method of Heat Treatment of Textiles.
149571	4-9-1980	Do.	Improved Slub Catchers.
150458	9-2-1982	D <sub>0</sub> .	Beat-up machanism for looms particularly used in wave line wearing machine.
151374	19-5-1980	Do.	A device for holding a pair of tubes or a tube and a cylindrical rod of different dia- meters for concentric or desired alignment thereof.
151569	14-7-1980	Do.	Device to Measure, Indicate and/or Control within present limits stretch/shrinkage of a sheet material.
141007	11-8-1976	National Dairy Development Board, Aband, State of Gujarat, India.	Automatic vending system for liquids.
142741	8-10-1975	Yoshio Murao, of Ha 56-1, Mausizumi- machi, Manzawa, Ishikuwa Pref, Japan.	Cleaning machine for bobbins with warte sliver.
143361	28-2-1975	FRITZ STAHLECHKER, of Josef-Neidhar- Strasse 18, D-7341, Bad Ueberkingen, West Germany, and Hans Stahlecker, of Halden- strasse 20, D-7334 Suessen, West Germany.	Method and apparatus for start spinning a thread of an open and spinning unit of an open end spinning machine.
143551	31-12-1975	Do.	Open end spinning unit containing means for cleaning fibrous material.
143635	28-2-1975	$D_0$ .	An open-end spinning machine incorporating a movable piccing-up apparatus.
144422	11-7-1977	National Diary Development Board, Anand, State of Gujarat, India.	A manual system for dirpensing a liquid like miln beverages and other liquids.
146140	4-6-1976	FUJI-TOYUKI CO. LTD., of 1217 Hayashi- cho, Takamatsu-shi, Kagawa-ken, Japan.	Oil lubricating device-
146888	11-3-1977	KIMMON MANUFACTURING COM- PANY LIMITED, of 2-3, 1-Chome, Shimura, Itabashi-ku, Tokyo, Japan and Kabushiki Kaisha Takenaka Seisakusho, of 1-51, 1- chome, Nakagawa Nishi, Ikuno-ku, Osaka- shi, Japan	Diaphragm type g is meter.
147149	20-10-1976	DURACELL INTERNATIONAL INC., at 3029 East Washington Street, Indianapolis, Indiana. U.S.A.	Container having pressure release device.
149063	29-2-1980	ION EXCHANGE (INDIA) LIMITED, of Ticcicon House, Dr. E. Moses, Road, Bombay-400011, Maharashtra, India.	Apparatus for separation of oils from in containing liquids.
150732	14-11-1980	ONODA CEMENT COMPANY LIMITED., of 6276 Oaza Oneda, Onoda-shi, Yamaguchi-ken, Japan.	An air clarifier.

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151714	22-9-1980	SPINDELEFABRIK SUESSEN, SCHURR, Stahlecker, & Grill G. m.b. H., Damnistrasse 1, 7334 Sussen, F.R.G.	A device for interrupting the supply of reving in drafting systems.
153798	. 12-5-1982	Naresh Kumar Goyle, 43-D/214, Manish Nagar, Versova Road, Andheri (W), Bombay- 400058, India.	Filding satty/crash helmet.
155247	14-12-1981	Shrikant Gajanan Pawar, 21-Dngesh, Shivthitth Society, Vishnu Nagar, Dombivli (W), Dist: Thane, M.S. Indian.	A device for utilization of heat energee from cooling Water and exhaust gas of an 1-C Engine plant.
156260	9-9-198 <b>2</b>	R. V. Bhagwat, 13 - Sai Prasad, 4th X Road, Prabhat Colony, Santacruz, (E).	An instrument for accurate level reading of a liquid contained in a burette or liquid contained in a burette or like glass tube.
156575	30-6-1982	Jaikrishn Gangaram Gyalani, of E-2/6, Sunder Nagar, S. V. Road, Malad (W), Bombay-400064.	An improved device for teaching multiplication tables.
140209	20-9-1974	The Bendix Corporation, At Executive Offices, Bendix Centre, Southfield, Michigan 48076, U.S.A.	A relay valve for limiting and modulating the fluid pressure in a spring brake actuator of a dual fluid circuit braking system.
140734	3-8-1973	CLUPAK, INCORPORATED, of 530, Fifth Avenue, New York, State of New York-10036, U.S.A.	Straw paper and process of making the same.
142022	5-1-1974	AMERICAN FLANGE & MANUFACTURING COMPANY, INC., of 1100 West Blancke Street, Linden, New Jetscy, U.S.A.	Plastic closure bushing.
142222	9-5-1974	AMERICAN FLANGE & MANUFAC- TURING COMPANY, Inc., of 1100 West Blancke Street, Linden, New Jersey, U'S.A.	A tear off convenience bottle closure.
142831	19-12-1974	MIDREX INTERNATIONAL B. V. ROTTERDAM, ZURICH BRANCH, of Netherlands, of Wilfredstrasse 12, 8032, Zurich, Switzerland.	A vertical shaft furnace for continuously heat treating dissimilarly sized particles.
14287 <del>4</del>	5-5-1976	AMERICAN FLANGE & MANUFACTURING COMPANY, INC., of 1100 West Blancke Street, Linden, New Jersey, U.S.A.	Bottle cap.
143186	15-5-1976	FRANZ PLASSER BAHNBAUMASCHIN- LN INDUSTRIEGESELLSCHAFT, m.b.H., Johannosgasse 3, Vienna 1, Austria.	Track tamping machine,
143719	28-12-1976	URANZ PLASSER BAHNBAUMASCHIN- EN INDUSTRIEGESSLLSCHAFT, m.b.H., Johannesg 1884 3, Vienna 1, Austria.	Travelling machine particularly a track tamping and levelling machine.
143637	22-11-1974	National Rasaurch Development Corporation, of 101 Newington Causway, London SE1, England	Hardinable sheet materials suitable for surgical splinting.
144002	30-7-1975	Rhone Poulens Industries, of 22 Avenue, Montaigne, 75 Paris (8th), France.	Micro-porous membrane containing asbestos and a process for its production.
144008	10-1-1977	[MS LTD., of 1886 Santa Anita Avonue, S. El, Monte, California 91733, U.S.A.	An alimentation _kit.
[44099	28-4-1975	RCA CORPORATION, 30, Rockedeller, Plaza, New York-10020, U.S.A.	Method and apparatus of cleaning a surfactof an article.
1,44375	29-12-1976	FRANZ PLASSER BAHNBAUMASCHIN- EN INDUSTRIEGESELLSCHAFT, m.b.H., Johannosgasse 3, Vienna 1, Austria.	Machine for tamping ballast beneath the sleepers of a railway track.
144376	29-12-1976	Dυ,	Tamping tool for track tamping machine
145115	4-1-1977	$\mathbf{Do}_{\mathbf{i}}$	improvements in or relating to machine for tamping ballast beneath the sleepers of railway track.

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145128	5-11-1975	Proceq S.A., of Riesbachstrasse 57/59, Zurich, Switzerland.	Apparatus for testing the hardness of materials.
144502	21-11-1977	PHILLIPS INDIA LTD, M/s, PEICO ELECTRONICS & ELECTRICALS LIMITED, Shivsagar Estate, "Block", Dr. Annie Bosont Road, Worli, Bombay-400018.  Maharashtra, India.	Hydraulically damped lifting mechanism for pick-up arm of a record player.
145425	8-6-1976	FRANZ PLASSER BAHNBAUMASCHIN- EN INDUSTRI-EGESELLSCHAFT, m.b.H., Johannesgasse 3, Vienna 1, Austria.	A track ronewal train for replacing track in sections.
145492	14-5-1976	Do,	A track tamping machine for consolidating the ballast beneath several sleepers of track.
147297	22-9-1977	Do.	Improvement in or relating to travelling track levelling tamping and lining machine arrangement.
147559	22-9-1977	Do.	Improvements in or relating to travelling track tamping levelling and lining machine arrangements.
145234	7-2-1975	HENRICUS GERHARDUS HERMANUS MARIA PAS, of 'S-Hoorenbergsoweg 13, Zeddam, The Notherlands.	An apparatus for pre-incubating eggs.
145246	4-8-1976	CCL SYSTEMS LTD of Cabeo House, 296-305. Ewell Road. Surbitan, Surrey, England.	Improved swaging die and press.
145313	10-1-1977	F. L. SMIDTH & CO., A/S., of 77, Vigerslev Alle, DK 2500, Velby, Copenhagen, Denmark	A method of burning pulverous raw materials such as cement raw meal time stove of chemically precipitated cacoa or alumina trihydrate in a plant.
145776	4-8-1976	CCL SYSTEMS LTD., Cabco House, 296—304. Ewell Road, Surbitan, Surrey, Eng.	Swaging dis.
145828	7-9-1977	GEORGE S. REPPAS, 1030, San Raymundo Road, Hillsborough. California, 94010, U-S.A	Combination bed and desk.
145958	5-6-1975	JUAN HAENER, of 8215 Harton Place, San Diego, California, U.S.A.	Building construction assembly and inter- locking hollow coment concrete blocks therefor.
145993	4-8-1977	NITO BOSEKI CO., LTD., of No. 8—1, Yacsu 2-chome. Chou-ko. Tokyo, Japan.	Method and apparatus for draw forming glass fibres.
146215	17-9-1976	AMERICAN Flange & Manufacturing company, Inc., of 1100 West Blancke Street, Linden, New Jersey, U.S.A.	Retractable pouring spout closure.
14650 (	19-1-1977	Robert Bosch GmbH., Postfach 50, 7000, Stuttgart-1, W.G.	Improvements in glw plugs for internal combustion engines.
146578	15-7-1977	DR. BECK & CO. AG., of 2000 Hamburg 28, Grossmannstrasse. 105, F. R. G.	Process for producing a directly tinnable wire.
146786	24-5-1977	PANDROL LIMITED, of 9 Holbern, London EC 1N, 2NE, England.	A railway sleeper and a railway rail-and- fastening assembly employing it.
147294	4-5-1978	Dipta Shyamal Mallick, of 4/1, 1st Rye Lane, Howrah-711 104, India.	Pocess and apparatus for the localised heat treatment of shaped articles.
147295	4-5-1978	Dipta Shyamal Mallick of 4/1, Kasondia, 1st Bye Lane, Howrah-711 104.	Method for the manufacture of circular blades for cutting stock in heated condition and circular cutting blades so manufactured.
147313	18-1-1976	AMERICAN FLANGE & MANUFACTU- RING COMPANY, INC., of 1100 West Blanck Street, Linden, New Jersey, U.S.A.	An apparatus inspecting closure flanges.

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147410	12-4-1977	AMERICAN FLANGE & MANUFACTU- RING COMPANY, INC. of 1100 West Blan- cke Street, Linden, New Jersey, U.S.A.	Apparatus for conveying neel closure flang
147549	16-8-1977	SCHUBERT & SALZER MASCHINEN- FABRIK AG., of Friedrich Ebert-Strasse 84, 8070 Ingolstadt, West Germany.	Apparatus for the removal of impurities in an open end spinning machine.
147583	10-2-1976	Claudio Aldecoa Lecanda of Vizcaya 5, Vitoria, Spain,	Parachute catch safety and opening mechanism for the braking of aerobombs.
147832	24-5-1977	SCHUBERT & SALZER MASCHINEN- FABRIK AG., of Friedrich-Ebert-Strasse 84. 8070, Ingolstadt, West Germany.	Apparatus for opening and mixing bales of of fibres.
147896	19-8-1977	Do.	Apparat <sub>18</sub> for separating contaminants rom fibrous material in particolar from cotton fibrous material.
147897	25-10-1977	Do.	Method & apparatus for cleaning fibrous material.
148411	11-5-1978	EADIE BROS & CO. LIMITFD, Victoria Works, Paisley, Country of Renfrew scotland.	Improvements in travellers for ring spinning machines.
148776	23-8-1978	Werkzeugmaschinen, Oerlikon buehrle AG., Birchstrasse, 155, 8050 Zurich, Switzerland.	Three pressure control valve for an indirectly acting compressed air brake.
148 <b>7</b> 77	23-8-1978	Do·	Control valve for an indirectly acting compressed air brake of type used in rail vehicles.
148889	17-6-1977	THOS. STOREY (ENGINEERS) LTD., of 8 Smith Wharf Road, London W2 1PB, England	Prefabricated panels for bridges.
149172	8-8-1978	MOTEURS LEROY-SOMER of Boulevard Marcellin Leroy, 16004 Angouleme, France.	Diffuser for hydro-electrical power plant and hydro-electrical power plant fitted with this diffuser.
149177	17-8-1977	TELEHOIST LIMITED, of Manor Road, Cheltenham, England.	Telescopping mechanism and a multi-stage hydraulic ram including the same.
149719	20-3-1978	TIDELAND SIGNAL CORPORATION, P.O. Box 52430, Houston, Toxas 77052, U.S.A	Enclosure for solar cell panel and solar cell panel.
14974	6-11-1975	A MERICAN FLANGE & MANUFACTU- RING COMPANY, INC of 1100, West Blan cke Street, Linden, New Jersey, U.S.A.	Improvements in and relating of drum closure
149830	25-7-1978	Choga Denki Kogyo Kabushiki Kaisha, of 13/3, Nihonbashi Kayabacho 2-chome, Chou-Ku, Tokyo, Japan	Apparatus for making a bi-metalic electrical contact
149926	12-5-1978	Festo-Maschinenfabrik Gotlieb Stoll, of Ulmer Strasse 48, Esslingen—12	Multiway valve used in pneumatic control systems.
143262	9-3-1976	Visvesvarays Iron & Steel Ltd., Bhadravati- 577301, Karnataka, India.	A method of prodoction of ferrovanadium.
151873	7-4-1981	Locas Industries Public limited Company, of Great King Street, Birmingham 19, England.	Master cylinder.
52181	23-2-1981	Do·	A servoboosters for vehicles braking systems.
152469	1-4-1981	Lucas Industries Public Limited Company, of Great King Street, Birmingham B19 2XF, England.	A method of manufacturing a master cylinder
47264	9-3-1978	Kontiki Chemicals and Pharmaceuticals Pvt. Ltd., of A. K. Office Building, Mill Road, Baliapatam, Kerala State, India.	Process for the prepn of coir derivatives.
147675	3-4-1978	ERODHULA KRISHNAVENI, of 12-2-13. Moses House, Maharanipet, Visakhapatnam 530,002, Andhra Pradesh, India.	Improvements in or relating to stoves.
48778	25-8-1978	Lucas Industries Public Limited Company,	Improvements in spreading disc brakes for ve vehicles.
48974	28-9-1979	Great King Street, Birmingham 19, England. Brakes India Limited, at Padi, Madras-600050	A self operative device for adjusting the brake lining with respective to the brake drum of a braking system.
49154	14-11-1979	SHORFF PILLAPPA VENKATASUBBIAH, at No. 12, Thimmaraya Setty Lane, Nagartha pet, Cross, Bangalore-560002, Karnataka State India.	An apparatus for discharging liquid in measures quantity.

## COMMERCIAL WORKING OF PATENTED INVENTIONS

CHEM. FNGG. LIST IV

The following Patents in the field of Chemical Engineering Industry are not being commercially worked in India as admitted by the Patentees in the statements filed by them under section 146(2) of Patents Act, 1970 in respect of Calendar Year 1985 generally on account of want of requests for licences to work the Patented inventions. Persons who are interested to work the said Patents commercially may contact the Patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name & Address of Patontee	Title of the invention
1	2	3	4
153943	9-10-1980	Institute of Gas Technology, 3424 South State Street, Chicago, Illinois 60616, U.S.A.	Improved process and a reactor for the production of fuel gas from coal.
147336	11-1-1978	Midrex International B.V. Rotterdem, Zurich Branch, Wilfriedstrasse 12, 8032 Zurich, Switzerland.	Method & apparatus for reducing particulate iron oxide to metallic iron with solid reductant.
153956	10-4-1981	Hoechst Aktiengesellschaft, D 6230 Frankfurt/ Main 80, Federal Republic of Germany.	Process for the production of calcium carbide.
153973	25-8-1981	Stamicarbon B.V., P.O. Box 10, 6160 MCGeleen, the Netheralnds.	Process for the preparation of phosphont acid and calcium sulphate anhydrite.
153988	6-8-1980	Hindustan Lever Limited, 165-166 Backbay Reclamation, Bembay-20, Maharashtra, India.	Synergistic deodrant compositions.
153989	6-8-1980	Do.	Synergistic deodorant composition.
153990	4-9-1981	Do.	Method of deciling of slack waxes and the deciled sluck wax obtained thereby.
153991	15-9-1980	, Do.	A synergistic liquid dewashing detergent composition for washing plates, dishes and saucepans.
153992	17-3-1982	Do.	Method of upgrading linayl acetate by removing chloride impurities.
154002	3-4-1980	Sulzer Brothers Limited, CH-8401 Winterthur, Switzerland.	A method of producing very pure magnesium oxlde.
154019	26-4-1980	Stamicarbon B.V., P.O. Box 10, Geleen, the Netherlands.	Thermosetting powder based on a unsaturated polyester resin and process for preparing the same.
154035	16-1-1981	Midrex Corporation, One NCMB Plaza, Charlotte, North Carolina 28280, U.S.A.	Method of producing direct reduced iron with fluid bed coal gasification.
154056	14-11-1980	Lubrizol Inc., 29400 Lakeland Blvd, Wickliffe, Ohio-44092, U.S.A.	A precess for preparing a lubricant additive comprising metal/metal compound metalloid complexes.
154108	21-3-1981	I.S.C. Smelting Limited, 6, James' Square. London SWIY 4LD, England.	Method of manufacturing zine with improved step of charging zine-smelting blast furnaces.
154133	30-8-1980	Rutgerswerke AG., Mainzer Landstrasse 217, D-6000 Frankfurt/Main 1, Germany.	Process for the preparation of highly aromatic pitchlike hydrocarbons.
154196	21-1-1980	Indian Explosives Limited, 34, Chowringhee, Calcutta-700071, West Bengal, India.	Improved cap-sensitive 'small dismeter slurried explosive conpositions and melled for the production thereof.
154210	21-5-1981	Mitsui Toatsu Chemicals, Inc., 2-5, 3-chome, Kasumigaseki, Chiyoda-ku, Tokyo, Japan.	Improvement in a process for the preparation of a catalyst system for polymerization of —olefins.
154319	30-10-1980	Hindustan Lever Limited, 165-166 Backbay Reclamation, Bombay-20, Maharashtra, India.	A process for preparing an adjunct for use in the manufacture of a detergent powder.
154326	12-5-1980	FMC CORPORATION, 2000 Market Street, Philadelphia, Pennsylvania 19103, U.S.A.	Process for preparing a crystalline insectici- dal pyrethroid enantiomer pair.
154420	29-6-1981	Union Carbide Corporation, 270 Park Avenue, New York 10017, State of New York, United States of America.	An improved silica supported catalyst composition and process for preparing the same.
154876	15-7-1981	Do.	Process for the preparation of novel phosphorous esters of cyanohydrins.

1	2	3	Process for producing a gaseous product from carbon aceaus material.	
141154	3-10-1975	President of Tohoku University, No. 1-1, Katahira 2-Chone, Sendai-shi, Miyagi-ken, Japan.		
141524	19-12-1974	Midrex International B.V. Rotterdam, Zurich Branch, Wilfriedstrasse 12, 8032 Zurich Switzerland.	Process for the continuous passivation of sponge iron particles.	
142008	16-5-1974	Warner Lambert Company, 21 Tabor Road, Morris Plains, New Jersey 07950, United States of America.	Method of removing hydrogen peroxide from soft contact lens.	
143087	3-9-1974	Rhone Progil S.A., 25 Quai Paul-Doumer, 92408 Courbevoie, France.	Process for oxyhalogenation of hydrocarbons and/or their derivatives.	
143835	<b>2</b> 8- <b>4</b> -1976	Rhone Poulene Industries, 22 Avenue, Montaigne, 75 Paris (8th) France.	Preparation of polyvinyl chloride.	
144044	19-12-1974	Midrex International B.V. Rotterdam, Zurich Branch, Wildfriedstrasse 12, 8032 Zurich, Switzerland.	Process for reducing iron oxide to metallic sponge iron with liquid or solid fuels.	
144657	27-3-1976	Rhone Poulenc Industries, 22, Avenue Montaigne, 75 Paris (8th) France.	A method of degasing polymers and copolymers.	
144978	29-6-1976	Pfizer Inc., 235 East 42nd Street, New York, State of New York, United States of America.	Preparation of gamma-pyrones.	
145501	30-6-1976	Union Carbide Corporation, 270 Park Avenue, New York, State of New York 10017, United States of America.	Improvements in adiabatic swing process for separation of gas mixtures levy selective adsorption.	
146284	23-6-1977	Halcon Rescarch and Development Corporation, 2 Park Avenue, New York, New York 10016, United States of America.	A process for the preparation of a supported silver catalyst for the production of ethylene oxide.	
146365	2-8-1976	British Gas Corporation, 59 Bhyanston Street, London, WIA 2AZ ENGLAND.	A process for the production of nickel-alumina coprecipitated catalysts.	
149751	10-2-1978	Phillips Petroleum Company, Bartlesville, State of Oklahoma, United States of America.	A process for preparing a passivating agent and the catalytic process using said passivating agent in presence of a cracking catalyst.	
149987	22-7-1978	Shin-etsu Chemical Co. Ltd., 6-1, Otemachi 2-chome, Chiyoda-ku, Tokyo, Japan.	An improved method for the polymerization of vinyl chloride monomer.	
147307	8-1-1979	Kontiki Chemicals & Pharmaceuticals Pvt. Ltd., A.K. Office Building, Mill Road, Baliapatam, Kerala State, India.	Process for preparing derivatives from coffe husks.	
147418	9-3-1978	Do.	A process for preparing an improved adhesive substance.	
147937	24-1-1979	Kontiki Chemicals and Pharmaceuticals Pvt. Ltd., A.K. Office Building, Baliapatam, Cannanore 670 010, Kerala State, India.	Process for the production of cellulose.	
149126	21-2-1980	The Indian Space Research Organisation, 'F' Block, Cauvery Bhavan, District Office Road, Bangalore 560009, Karnataka, India.	An improved process for producing polyols.	
154070	4-6-1982	Kontiki Chemicals & Pharmaceuticals Pvt. Ltd., A. K. OFFICE Building, Mill Road, Baliapatam, Cannanore 670010, Kerala.	A method for the production of heavy metal in adsorbent.	
153437	18-9-1981	Indian Space Research Organisation, Space, 'F' Block, Cauvery Bhavan, District Office Road, Bangalore 560009, Karnataka, India.	A process for production of fire retardant rigid polyurethane foam.	
149900	11-7-1980	Indian Space Research Organisation, Space, 'F' Block, Cauvery Bhavan, District Office Road, Bangalore-560009, India.	A process for the production of polyhydroxy ester resins.	
154055	24-10-1980	221-227 Anzac Parade, Kensington, New South Wales, Commonwealth of Australia.	A process for the production of construction materials.	
151 <b>5</b> 53	26-10-1979	Continental Pharma Inc., 135, Avenue Louise, 1050 Brussels (Belgium).	Apparatus for proportionating malondialde. hyde.	
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153896	16-2-1981	YoshitakaMasuda, 54 Koro, Kodera-cho, Kanzakigun, Hyogo-prefecture, Japan.	A high sulphate slag coment and the method for manufacturing this cemont.	
153898	1-4-1981	Interox Chemicals Limited, Hanover House, 14, Hanover Square, London WIR OBE, England.	Liquid detergent compositions and process for making the same.	
153888	17-6-1980	Union Carbide Corporation, 270 Park Avenue, New York, State of New York 10017, United States of America.	A process for making heterogeneous ethylene based polymers having a high tear strength.	
153854	28-5-1981	Voest-Alpine Aktiengesellschaft, D-6230 Frankfurt am main 80, Federal Republic of Germany.	Process for producing high grade iron sponge particles for smelting plants.	
153881	25-9-1979	Lubrizol Inc., 29400 Lakeland Blvd. Wickliffe, Ohio-44092 U.S.A.	Process for the preparation of carboxylic solubilizer/surfactant composition.	
153842	26-4-1980	CPC International Inc., International Plaza, Englewood Cliffs, New Jersey 07632, U.S.A.	Method for converting starch hydrolyzate to dextrose containing syrup using glucoamylase immobilized on porous alumina.	
153845	14-5-1981	Interox Chemicals Ltd., Hanover House, 14, Hanover Square, London WIR OBE, England.	Process for the direct preparation of an alkalimetal or alkaline earth metal peroxide in finely divided form.	
153737	27-1-1981	Shell Internationale Research Maatschappij B.V., Carel van Bylandtlaan 30, The Hague, The Netherlands.	A process for the preparation of hydrocarbon mixture from a mixture of carbon monoxide and hydrogen.	
153746	20-7-1981	Laboratory Prophin S.p.A., Via Binda 21-20143 Milano, Italy.	Process for the preparation of amide derivatives of p-isobutyl phenyl-propionic acid.	
153718	1-7-1980	Shell Internationale Research Maatschappij B. Vi, Carel van Bylandtlaan 30, The Hague, The Netherlands.	Process for the preparation of a hydrocarbon mixture.	
153648	13-1-1981	Battelle Development Corporation, 505 King Avenue, Columbus, Ohio 43201, U.S.A.	A method of producing a reaction gas having a low content of nitrogen oxides and sulphur dioxide from the combustion of hydrocarbons in a multi solid fluidized bed having a lower dense fluidized bed.	
153602	27-8-1980	Mitsubishi Denki Kabushiki Kaisha, 2-3, Marunouchi 2-chome, Chiyoda-Ku, Tokyo, Japan.	Heat resistant resin composition.	
153580	14-1-1981	Gas Sweetener Associates, 7777 Bonhomme Avenue, Clayton, St. Louis County, Missouri, U.S.A.	Improved process for scavenging hydrogen sulfide from hydrocarbon gases.	
153581	6-2-1981	Union Carbide Corporation, 270 Park Avenue, New York, State of New York 10017, United States of America.	Compositions of alkylene-alkyl acrylate copolymers having improved flame retardant properties.	
153585	17-9-1981	Voest-Alpine Aktiengesellschaft, A-1011 Vienna, Friedrichstrasse 4, Austria.	Process for treating iron sponge.	
153523	1-6-1981	American Cyanamid Company, Wayne, New Jersey, United States of America.	Substituted imidazolinyl nicotine acids, esters and salts and use thereof as herbicidal agents.	
153496	3-11-1980	Hoechst Aktiengesellschaft, 6230 Frankfurt/ Main 80, Federal Republic of Germany.	Process for the manufacture of stablized, pulverulent red phosphorus.	
153409	5-12-1980	Nippon Zeon Co. Ltd., 6-1, 2-Chome, Marunouchi, Chiyoda-ku, Tokyo, Japan.	Method for inhibiting polymerization of conjugated dienes in a process for separating conjugated dienes from a hydrocarbon mixture.	
153458	4-6-1982	Monsanto Company, 800 North Lindberg Boulevard, St. Louis, Missouri 63177, United States of America, (formerly Missouri 63166).	Process for synthesizing ammonia from hydrogen and nitrogen.	
153474	18-7-1980	Sid Richardson Carbon & Gasoline Co., 31st Floor, Fort Worth National Bank Build- ing, Fort Worth, Texas 76102, USA.	A process for producing carbon black and apparatus therefor.	

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153342	23-12-1980	Hoechst Aktiengesellschaft, D-6230 Frankfurt/Main 80, Federal Republic of Germany, and Krupp Stahl Aktiengesellschaft, D 4630 Bochum 1, Federal Republic of Germany.	Process for the manufacture of desulfurizing agents based on calcium oxide containing calcium carbide for crude iron or steel melts.	
153347	11-3-1981	American Cyanamid Company, Wayne, New Jersey, United States of America.	An improved process for the manufactu of alumina from alumina ores.	
153317	12-2-1981	Dr. C. Otto & Comp. GmbH, Christstrasse 9, 4630 Bochum, West Germany.	A method of washing H <sub>2</sub> S out of coke-oven gas.	
153293	12-5-1981	Ciba Geigy AG., Klybeckstrasse 141, 4002 Basle, Switzerland.	A process for the manufacture of nove benzazole derivatives.	
153276	28-11-1980	Skf Steel Engineering Akticbolog, P. O. Box 202. S-813 OO Hofots, Sweden.	A method for producing liquid iron from iron oxide.	
153200	1-6-1979	Unie Van Kunstmestfabrieken B. V., P. O. Box 45, 3500 AA Utrecht, The Netherlands.	Process and device for the preparation of a product containing ammonium orthophosphate.	
153082	3-7-1981	F. Hoffmann-La Roche & Co. Aktiengesell- schaft, 124-184 Grenzacherstrasse, Basle, Switzerland.	Process for the manufacture of purrollding derivatives.	
153077	3-5-1980	Stamicarbon B. V., P. O. Box 10, Geleen, The Netherlands.	Method for the preparation of melamine.	
153038	30-8-1980	Shinei Kashiwayama, No. 558 Iwasaki, Kamitondacho, Nishimuto-gun, Wakayama- Ken, Japan.	Process for preparing a dermatic medicament	
153014	6-11-1980	Bethlehem Steel Corporation, Bethlehem, Pennsylvania 18016, U.S.A.	Thermally treated metallic coated ferrous base product having improved ductility and method of making product.	
153015	6-11-1980	Do.	A method for producing a thermally treated metallic coated ferrous base product.	
152973	28-5-1980	Flowcon Oy, Painontie 25, 37630 Valkeakaski 3, Finland.	A binder (cement) and process for producir, the same.	
152939	18-9-1979	Lubrizol Inc., 29400 Lukeland Blvd. Wickliffe, Ohio 44092 U.S.A.	Process for the preparation of a nitrogen containing, phosphorus-fee carboxylic aciderivative.	
1 <b>529</b> 53	20-6-1980	Sumitomi Metal Industries, Ltd., 15, 5-chome, Kitahama, Higashi-ku, Osaka-shi, Osaka, Japan.	Production of carbon steel and low-alloy steel with bottom blowing basic oxygen furnace.	
155608	1-10-1981	Dresser U. K. Limited, 197 Knightsbridge, London SW7 1RJ England.	A method & apparatus for treating a plollu gas with a liquid.	
152910	[1-4-1980	Lubrizol Inc., 29400 Lake Land Blvd., Wickliffe, Ohio 44092, U.S.A.	Process for proparing mixed metal salts useful as additive for lubricants or function; fluids.	
152912	9-5-1980	Stamicarbon B. V., P. O. Box 10, Galeen, The Netherlands.	Process for treating urea containing waste water for recovering NH <sub>3</sub> and CO-therefrom and utilising said process in the process for preparing melamine.	
152892	13-5-1980	Union Carbide Corporation, 270 Park Avenue, New York, State of New York 10017, United States of America.	An improved process for the purification of an industrial gas stream.	
152828	14-5-1981	Pharmindustrie, 35 Quai du Monteir De Cage, 92231, Gennevilliers, France.	A process for the preparation of a mixture of sulphated polysaccharides.	
152832	17-6-1980	Hindustan Lever [Limited, 165-166 Backbay Reclamation, Bombay-20, Maharashtra, India.	A process for the reletive hydrogenation of unsaturated fatty acid with a metallic catalyst in the presence of ammonia.	
152814	27-7-1979	Westinghouse Electric Corporation, Westing- house Bldg., Gateway Centre, Pittsburgh pennsylvania 15222, USA.	A method of preparing a clear solution of a metal alkoxide.	
152758	1-4-1980	Stamicarbon B.V., P. O. Box 10, Geleen, The Netherlands.	Process for the preparation of a catalytic titanium component.	

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152715	4-9-1981	Hindustan Lever Ltd., 165-166 Backbay Reclamation, Bombay-20, Maharashtra, India.	A method preparing non-edible dehydroxy- lated short chain $(C_1 \text{ to } C_4)$ esters of hardened castor acids for use in soap making, lubricants and paints.	
152718	22-10-1980	Do.	Process for bleaching naturally accuring oil and fat containing a coloured impurity.	
152722	8-7-1980	Do.	Process for producing a heteropolysaccharide	
152725	12-10-1979	Hoechst Aktiengesellschaft, 6230, Frankfurt/ Main 80, Federal Republic of Germany.	Continuous production of azo pigments.	
152671	2-4-1980	Shell Internationale Research Maatschappij B. V., Carel van Bylandtlaan 30, The Hague. The Netherlands.	Process and burner for the gasification of solid $f_{\mathbf{u}}\mathbf{e}\mathbf{l}$ .	
152676	28-4-1980	Wastinghouse Electric Corporation, Westing- house Bldg., Gateway Centre, Pittsburgh Pennsylvania 15222, USA.	A method for preparing an electrostatic powder coating composition.	
152524	4-6-1980	Stamicarbon B. V., P. O. Box 10, Geleen. The Netherlands.	Process for the preparation of filaments of high modulus and tensile strength.	
152477	26-6-1979	1. S.C. Smelting Ltd., 6 St. James' Square, London SWIY-4LD, England.	Process for producing a zinc/Lead oxide product suitable for briquetting.	
152485	8-5-1979	Nissan Chemical Industries Ltd., 7-1, 3-chome, Kanda-Nishiki-cho, Chiyoda-Ku, Tokyo, Japan.	Improved process for polymerizing ethylene.	
152486	19-6-1979	American Cyanamid Company, Wayne, New Jersey, United States of America.	Melt-spinning acrylonitrile polymer there from low molecular weight ploymer and acrylonitrile polymer fibro so prepared.	
152450	17-11-1979	Union Carbide Corporation, 270 Park Avenue, New York, States of New York 10017, United States of America.	A catalytic process for producing ethylene copolymer.	
152431	21-2-1980	Laporte Industries Limited, Hanover House, Hanover Square, London, WIR OBE, England.	Process for apprading iron-containing materials by the removal of iron therefrom.	
152405	20-12-1979	Shell Internationale Research Maatschappij B. V., Carel van Bylandtlaan 30, The Hague, The Netherlands.	Improvements in or relating to a process for regenerating solvents used in acid gas removal.	
152377	5-5-1980	Lubrizol (nc., 29400 Lake Land Blvd., Wickliffe, Ohio 44092, U.S.A,	A method for preparing phosphorus acid metal salt composition.	
152326	6-5-1981	USV Pharmacoutical Corporation, Sparsdale Road, Tuckahse. New York, United States of America.	Process for preparing cyclic amides.	
152254	10-8-1979	Stamicarbon B. V., P. O. Box 10, Galcen, The Netherlands.	Process for the purification of cycloal- kanone mixtures obtained in the oxidation of cycloakanes.	
152255	ા4-8-1979	Midrex International B. V. Rotterdam, Zurich Branch, Wilfriedstrasse 12, 8032 Zurich, Switzerland.	Method for the direct reduction of iron using gas from coal.	
152196	30-9-1980	Monsanto Company, 800 North Lindberg Boulevard, St. Louis, Missouri 63166, U.S.A.	A process for preparing a herbicidal composition.	
152015	20-5-1980	Hindustan Lever Limited, 165-166 Backbay Reclamation, Bombay-20, Maharashtra, India.	Aqueous concentrated liquid fabric softening composition.	
152042	13-8-1979	Mitsui Toatsu Chemicals, Inc., 2-5, 3-chome, Kasomigaseki, Chiyoda-ku, Tokyo, Japan.	Process for preparing isopropenyl phenol.	

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Patent No.	Date of Patent	Name & Address of Patentees	Title of the inventions	
152053 21-2-1979		Santanu Roy, 13 Nanda Kumar Chowdhury Lane, Calcutta-700006.	A process for manufacturing a polymeric foam.	
151785	12-6-1979	Hoechst Aktiengesellschaft, 6230 Frankfurt Main 80, Federal Republic of Germany.	Continuous diazotization of amines.	
151790	[6-2-1980	Outokumpu Oy, Outokump Finland.	A process for scrubbing cyanide-bearin furnace gases which are produced in the metallurgical industry.	
151977	29-10-1979	Shell Internationale Research Maatschappij B. V., Carel van Bylandtlaan 30, The Hague, The Netherlands	Process & equipment for the oxidation of soot obtained in the preparation of a gamixture containing hydrogen and carbo monoxide.	
151804	29-1-1980	Kureha Kagaku Kogyo Kabushiki Kaisha, Hormedoi-cho, 4-chome, Nihonbashi, Chuo- ku, Tokyo, Japan.	A process for producing ortho-methox cinnamaldehyde.	
151809	22-12-1980	Nagano Miso Kabushiki Kaisha, 3-9-29, Tenjin, Uedashi, Nagano-ken, Japan.	Method of preparing raw materials for albumin rich food stuff without salt.	
151891	13-8-1979	Mitsui Toatsu Chemicals, Inc., 2-5, 3-chome, Kasumigaseki, Chiyoda-ku, Tokyo, Japan.	Process for producing alkenyl phenol and cits polymer.	
151895	14-10-1980	Shin-Etsu Chemical Co. Ltd.,-6-1, Otemachi, 2-Chome, Chiyoda-ku, Tokyo, Japan.	Method for the preparation of vinchloride resins by suspension polymerisation.	
151776	13-6-1979	Stamicarbon B.V., P. O. Box 10, Galeen, The Netherlands.	Process for the treatment of urea solution and apparatus therefor.	
151581	6-3-1979	Monsanto Company, 800 North Lindbergh Boulevard, St. Louis, Missouri 63166, United States of America.	Process for separating gas from gaseous fee mixture.	
151559	2-4-1981	John Wyeth & Brother Limited, Hunter- combe Lane, South, Taplow, Maidenhead, Berkshire, England.	Process for the production of thiazoles.	
151532	16-6-1979	Outokumpu Oy, Outokumpu, Finland.	Process for the selective froth-flotation sulfidic, oxidic and salt-type minerals.	
151516	<b>4-3</b> -1980	Stamicarbon B.V., P.O. Box 10, Galcon, the Netherlands.	Method for the purification of benzaldshy	
151252	28-6-1978	Henkel Kommanditgesellschaft Auf Aktien, Henkelstrasse-67, 4000 Dusseldorf-Holthausen, Federal Republic of Germany.	Method for producing leather.	
1 <b>5</b> 0967	17-3-1979	Hoechst Aktiongssellschaft, 6230 Frankfurt/ Main 80, Federal Republic of Germany.	Process for the preparation of red phosphor stabilized against oxidation.	
150938	21-3-1979	Midrex Corporation, One NCNB Plaza, Chariotte, North Carolina, 28280 USA.	Method & apparatus for reducing particula iron oxide to molten iron with solutions.	
150619	20-3-1979	P.W.T. Plastic World Technology Limited, 9495 Triesen, Liechtenstein.	A method and apparatus for the continuous	
150626	13-9-1978	Laszlo Paszner, 3906 West 33rd Avenue, Vancouver, British Columbia, Canada, and Pei-Ching Chang, 180 West 22nd Avenue, Vancouver, British Columbia, Canada.	A method for the saccharification of lignocellulose and the concomitant recovery of lignin therefrom.	
150497	8-11-1978	Monsanto Company, 800 North Lindbergh Boulevard, St. Louis, Missouri 63166, United States of America.	gh A process for proparing thermoplastic compositions.	
150105	8-1-1979	Hoechst Aktiengesellschaft, D-6230 Frankfurt/ Main 80, Federal Republic of Germany.	A process for the preparation of ethylene copolymers.	
150149	13-7-1978	Do.	Process for the preparation of polyvin butyral having improved properties.	

#### RENEWAL FEES PAID

#### CESSATION OF PATENTS

150971 153834 155984 157257.

## RESTORATION PROCEEDINGS

(1)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 143656 granted to Bharat Heavy Electricals Limited for an invention relating to "a method for the preparation of pulp from mica".

The patent ceased on the 20-5-86 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part-III, Section 2, dated the 11-7-1987.

Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents. The Patent Office, 214. Acharya Jagadish Bose Road, Calcutta-700017 on or before the 10th December 1987 under Rule 69 of the patents Rules, 1972. A written statement in triplicate setting out the nature of the Opponent's interest, the facts upon which

he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

(2)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 143896 granted to Nico-Pyrotechnik Hanns-Jurgen Diederichs KG for an invention relating to "impact detonator".

The patent ceased on the 24-5-86 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part-III, Section 2, dated the 11-7-87.

Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents. The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-700 017 on or before the 10th December 1987 under Rule 69 of the Patents Rules, 1972. A written statement in irriplicate setting out the nature of the Opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filled with the notice or within one month from the date of the notice.

(3)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 149755 granted to Stopine Aktiengesells-chaft for an invention relating to "pouring tube changing arrangement and a metallurgical Vessel provided with the same".

The patent ceased on the 1-6-86 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part-III, Section 2, dated the 11-7-87.

Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents. The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-760 017 on or before the 10th December 1987 under Rule 69 of the Patents Rules, 1972. A written statement in triplicate setting out the nature of the Opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

(4)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 152590 granted to Anaren Microwave Incorporated for an invention relating to "apparatus for generating a representation of the bearing of a source of microwave energy."

The patent ceased on the 12-7-86 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part-III, Section 2, dated the 11-7-87.

Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents, The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-700 017 on or before the 10th December 1987 under Rule 69 of the Patents Rules, 1972. A written statement in triplicate setting out the nature of the Opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

(5)

Notice is hereby given that an application was made under Section 60 of the Patents Act. 1970 for the restoration of Patent No. 156590 granted to Ravindra Baburao Marathe for an invention relating to "electronic pulse discriminator for carrying out the pulse discrimination technque".

The patent ceased on the 12-4-87 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part-III, Section 2, dated the 11-7-87.

Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents. The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-700017 on or before the 10th December 1987 under Rule 69 of the Patents Rules, 1972. A written statement in triplicate setting out the nature of the Opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filled with the notice or within one month from the date of the with the notice or within one month from the date of the

#### (6)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 156921 granted to Keith Hancock Structure Ltd. for an invention relating to "load support arrangement of cantilever type".

The patent ceased on the 5-5-87 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part-III, Section 2, dated the 11-7-87.

Any interested person may give notice of opposition to Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents, The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-700 017 on or before the 10th December 1987 under Rule 69 of the Patents Rules, 1972. A written statement in triplicate setting out the nature of the Opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice notice.

### REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Design Act, 1911.

The date shown in the each entry is the date of registration of the design included in the entry.

- Class 1. No. 158028. Firdaus Jehangir Dadabhoy, an Indian, of Shalimar Apartments, Cumballa Hill, Bombay-400 036, State of Maharashtra, India. "Coupling". 17th February, 1987.
- Class 1. Nos. 158029, 158030, 158031, 158032. Firdaus Jehangir Dadabhoy, an Indian, of Shalimar Apartments, Cumballa Hill. Bombay-400 036, State of Maharashtra, India. "Joiner". 17th February, 1987.
- Class 1. No. 158104. M.D. Ravichandran, an Indian National, whose address is 33-D, Sheikh Sarai, Phase I. (MIG), New Delhi-110017. "Water Filter". 9th March, 1987.
- Class 1. No. 158127. Peico Electronics and Electricals Limited, of Shivsagar Fstate, Block 'A', Dr. Annie Besant Road, Worli, Bombay-400018, Maharashtra, India, an Indian Company. "a Car Cassette Player". 11th March, 1987.

- Class 1, No. 158730. Rohini Enterprises, 16/2, W.E.A., Sewak Bhavan, Karol Bagh, New Delhi-110005, India, a Partnership concern. "Portable Carbonator". 24th August, 1987.
- Class 3. No. 158045, 158046. National Plastics, at plot No. 84, G.I.D.C. Estate, Odhav, Ahmedabad, Gujarat State, India, an Indian Registered Part-nership firm. "Containers". 23rd February, 1987.
- Class 3. No. 158061. Labin Scientific Instruments, 7-8, Arya Samaj Mandir, New Moti Nagar, New Delhi-110015, India, a partnership concerned. "Water Bath". 3rd March, 1987.
- Class 3. No. 158163. Labin Scientific Instruments, 7-8, Arya Samaj Mandir, New Moti Nagar, New Delhi-110015, India, a Partnership concern. "Double Wall Water Bath". 25th March, 1987.
- Class 3. No. 158173. Aktiebolaget Draco, a Swedish Body corporate of Tunavagen 43, Lund, Sweden. an "Aerosol Inhalation Device". 27th March, 1987.
- Class 3. No. 158333. Rajinder Nath, an Indian national, C/o. C. L. Electrical & Mechanical Co., 1-2, Industrial Estate, Ambala City-134002, Punjab, India. "Drive Coupler for a mixing machine". 12th May, 1987.
- Class 3. No. 158679. Deepti Industries, 52/41, Gali No. 4-K, Anand Parbat, Industrial Area, New Delhi-110005, India, a Proprietorship firm. "Pepper grinder & Salt Dispenser". 14th August, 1987.
- Class 4. No. 158089. Supriya Wonderwood Pvt. Ltd., Indian Company incorporated under the Companies Act, 1956, carrying on business at 160/64, Sant Tukaram Road, Bombay-400 009, Maharashtra, India. "Cap for fence", 5th March, 1987.
- Class 5. Nos. 158176, 158177. The Gujarat Co-operative Milk Marketing Federation Limited, a Federation registered under the Gujarat State Co-operative Societies Act, 1961, City of Anand 388 001, State of Gujarat, India. "Container Pack". 30th of Gujarat, India. March, 1987,
  - Extn. of Copyright for the Second period of five years.

Extn. of Copyright for the Third period of five years. Nos. 146294, 146296, 146409, 146319, 146320, 146321, 146930, 146319,

Nos. 144381, 144382, 144383, 144387, 144388, 144389, 144390, 145126, 145127, 145128, 145129, 145448, 146295. ..... Class-3.

R. A. ACHARYA, Controller General of Patents, Designs and Trade Marks.